

NOTE THE SOAP INDUSTRY SECTION

The American Perfumer

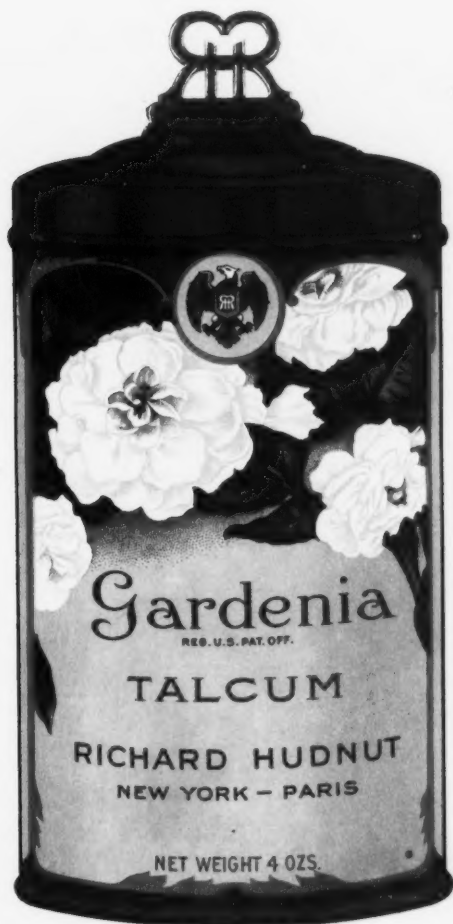
and Essential Oil Review

PERFUMER PUBLISHING CO.

80 MAIDEN LANE, NEW YORK

JULY 1917

VOL. XII
NO. 5



(SEE PAGE 9)

AMERICAN CAN COMPANY

(STOPPER FACTORY)
NEW YORK

USED BY THE LARGEST CONSUMER

MUST BE A REASON FOR IT

BERTRAND'S CONCRETES AND ESSENTIAL OILS

PURITAN BRAND SYNTHETICS

EMERY CANDLE CO'S STEARIC ACID

SELLING AGENTS

ROCKHILL & VIETOR FOR

22 Cliff St., New York, 140 No. Market St., Chicago.

Cover Lithographed by THE ADDISON LITHOGRAPHING CO. Rochester, N.Y.



The Seal of Quality



OILS AND WAXES

Cold Cream Oils

Petrolatums

Mineral Jellies

Bees' Wax

Ceresine Wax

Stearic Acid

Cocoonut Oil

Japan Wax

Paraffine Wax

PERFUMES AND ESSENTIAL OILS

Lilac M B

Heliotrope M B

A new synthetic Oil of very delicate perfume

The absolutely fresh Heliotrope flower perfume

SOAP CHEMICALS

Soda Ash

and

Caustic Soda

All grades.

100 John Street
Tel. 4134 John

MADERO BROS., Inc.
NEW YORK CITY

115 Broadway
Tel. 7880 Rector

Cable Address: Maderobro—Codes: A B C, 5th and Western Union

PERFUMERY SYNTHETICS

AND

AROMATIC CHEMICALS

STAPLES and NOVELTIES

CHUIT, NAEF & CO., Geneva, Switzerland

M. NAEF & CO., Successors.

UNGERER & CO., Sole Agents, 273 Pearl St., New York

514 Arch St., PHILADELPHIA.

526 W. Madison St., CHICAGO.

417 Market St., SAN FRANCISCO.

The American Perfumer

and Essential Oil Review

The Independent International Journal devoted to perfumery, soaps, flavoring extracts, etc. No producer, dealer or manufacturer has any financial interest in it, or any voice in its control or policy.

ONE DOLLAR A YEAR.
TEN CENTS A COPY.

NEW YORK, JULY, 1917.

Vol. XII. No. 5.

THE AMERICAN PERFUMER
and **ESSENTIAL OIL REVIEW**
PUBLISHED MONTHLY.
PERFUMER PUBLISHING COMPANY
80 Maiden Lane.

LOUIS SPENCER LEVY, President and Treasurer, 80 Maiden Lane
EDWARD W. DREW, Secretary, New York

Entered as Second-class Matter March 22d, 1907, at the Post Office at New York, N. Y., Under the Act of Congress of March 3d, 1879.

TERMS OF SUBSCRIPTION

The United States and Possessions, . . .	\$ 1.00 A Year
Canada and Mexico, . . .	1.50 " "
Foreign, . . .	2.00 " "

MANUFACTURING PERFUMERS' ASSOCIATION.—President, A. M. Spiehler, 202 Court street, Rochester, N. Y.; Secretary, Walter Mueller, 309 Broadway, New York.

FLAVORING EXTRACT MFRS. ASSN.—President, F. P. Beers, Earlville, N. Y.; Secretary, Gordon M. Day, Milwaukee, Wis.

PERFUME IMPORTERS' ASSOCIATION.—President, B. E. Levy; Secretary, W. G. Walker, 25 W. 32d street, New York.

NATIONAL MANUFACTURERS OF SODA WATER FLAVORS.—President, W. F. Meyer, St. Louis; Secretary and Attorney, Thos. E. Lannen, Chicago, Ill.

BARBERS' SUPPLY DEALERS' ASSOCIATION.—President, Bernard De Vry, 26 Main street, Evansville, Ind.; Secretary, Joseph Byrne, 9 Pine street, New York.

PERFUMERY, SOAP AND EXTRACT ASSOCIATION OF CHICAGO.—President, Henry Bartold; Secretary, G. H. Redmond.

CONTENTS

Copyright, 1917, by Perfumer Publishing Company

EDITORIAL:	Page.
Post Office Dry Bulletin; Price Maintenance Bill.....	129
Premium Fight; Child Labor Law; Business as Usual.....	130
Babson's Trade Outlook; Alcohol Ruling.....	131
FLAVORING EXTRACT SECTION:	
Report of Eighth Annual Convention.....	132
Pure Food and Drug Notes.....	139
PERFUMERY SECTION:	
Future of Taloum Powder, by Jules Smucker.....	140
England's Synthetic Possibilities.....	140
Price Problems for Perfumers.....	142
Trade Notes.....	143
New Incorporations.....	146
New Publications, etc.; In Memoriam; Obituary Notes.....	147
Patents and Trade Marks.....	148
Foreign Correspondence and Market Report.....	150
SOAP INDUSTRY SECTION:	
Success of Soap Section; Fat Famine Feared.....	153
Glycerine from Sugar; Potash Industry Notes.....	154
Methods of Analysis for Fats and Oils.....	155
On the Detergent Action of Soap.....	157
Bigger Vegetable Oil Crops; Canadian Tariff.....	159
Market Report on Tallow, Glycerine, Materials, etc.....	160

THE SITUATION AT WASHINGTON.

The injection of prohibition into the legislative situation in Congress has not only delayed matters, but has thrown both the Food Bill and the War Revenue Bill high in atmosphere of uncertainty. The Revenue Bill is held up until the Food Bill is disposed of. If the Food Bill, as finally enacted, carries with it the prohibition rider, the entire War Revenue schedule will have to be recast to make up a deficiency estimated at \$600,000,000 a year. Meanwhile the M. P. A., the F. E. M. A. and other organizations affected will do well to keep a tight grip on the situation, using especial vigilance to guard against surprises in the way of surreptitious increases in tax rates already supposed to be practically settled. It is very doubtful if either bill will get to the President for his action before the first week in August.

Our Washington correspondent says:

WASHINGTON, July 16.—Food control legislation, prohibition and the War Revenue Bill continue to share the attention of manufacturers of perfumery, toilet goods, soaps, proprietary articles, flavoring extracts, etc. There have been interesting developments and more are in prospect. The ultimate result is uncertain.

The Revenue Bill was reported from the Senate Committee on Finance with only three votes against it, only to be held up pending action by the Senate on the Food Control Bill, and finally withdrawn owing to complications in the fight over prohibition. The withdrawal was due to the radical action taken by the Senate on prohibition amendments to the Food Bill.

Senator Simmons, chairman of the Committee on Finance, said very frankly that the possibility of the government losing a great deal of revenue from liquors and being called upon to raise a great deal more money owing to certain phases of the prohibition situation was such that it was not known even approximately how much money was needed. Therefore the Revenue Bill was withdrawn, so the committee could revise it if necessary in the light of the final form of the prohibition legislation.

This last question presents at least two problems from the standpoint of the industries producing perfumes, toilet preparations, proprietary articles, drugs, soaps, flavoring extracts, etc., namely, whether a prohibition law may be so drastic that the cost of alcohol for use in these industries would be prohibitive, and whether loss of revenue from liquor taxes may cause Congress to seek sources for additional funds not heretofore contemplated.

Some proposed taxes would have to be increased and new taxes devised in the readjustment. Perfumes, cosmetics, toilet preparations and the like offer targets for statesmen who consider them luxuries.

As reported by the Senate Finance Committee, the War Revenue Bill contains this provision, which is giving perfumers, extract makers and others considerable concern:

"SEC. 304. That upon all distilled spirits produced in or imported into the United States upon which the tax now imposed by law has been paid, and which, on the day this Act is enacted, are held by a retailer in a quantity in excess of 50 gallons in the aggregate, or by any other person, corporation, partnership, or association in any quantity (*whether in the original condition or mixed or combined with any other article*), and which are intended for sale, there shall be levied, assessed, collected and paid a tax of \$1.10 on each roof gallon."

A little joker seems to be hidden in the *italicized* clause in the above section. Its effect would be serious in various ways and really just what it may be interpreted to mean is more or less of a puzzle. It is the subject of an important conference of affected interests at Atlantic City today.

Members of the Senate Committee on Finance are receiving a great many protests against Section 304 of the War Revenue Bill as it was amended by the Finance Committee. These protests are coming from perfumers, manufacturers of flavoring extracts, drugs, medicines, etc., and chemists and others who use alcohol in the making of their products.

Under the terms of the amended section an additional tax of \$1.10 per gallon would be levied on stocks of alcohol held by retailers upon the passage of the act in a quantity exceeding fifty gallons, or by any other person or concern in any quantity. The section came over to the Senate from the House substantially in the language so far mentioned, but the Senate amended the section so that this extra tax would apply on alcohol "whether in the original condition or mixed or combined with any other article."

There the trouble began. The protestants who do not want to pay this tax write to the Finance Committee that it would be unjust to apply it to chemicals, perfumes, drugs, proprietary medicines, flavoring extracts, etc., containing alcohol, yet that is what the bill proposes to do.

The amendment was inserted practically at the last minute before the bill was ordered reported to the Senate, because internal revenue officials reported that manufacturing chemists were withdrawing from bond large quantities of alcohol or distilled spirits and adding small quantities of drugs with a view to claiming that the product was exempt from the additional tax applying to stocks of alcohol on hand when the bill should become law. The Senate committee amendment would have prevented such action, it is believed.

The internal revenue people made the charge only against the manufacturing chemists, it is stated, but the amendment was so phrased as to hit the perfumers, flavoring extract interests, proprietary manufacturers and others. Persons connected with the Finance Committee say that the language of the amendment is probably broader than was intended.

It is understood that efforts will be made to amend the bill so as to narrow the objectionable clause in Section 304, but whether this result will be accomplished before the bill comes from the committee as a reported measure again is not known. It is said that the committee may not hold another meeting before reporting the bill out finally after the Food Bill passes the Senate. If so, efforts to change the language of Section 304 will doubtless be made on the floor of the Senate.

The Food Control Bill has been before the Senate for four or five weeks and during much of that time various phases of the prohibition question have been discussed. Some time ago the Senate adopted a series of amendments to the bill dealing with prohibition. These may be summarized as follows:

Prohibition of the use of food products in producing distilled spirits.

Prohibition against the importation of distilled liquors.

Authorization to the President to take over liquor

stored in bond upon payment of the cost of producing it plus 10 per cent. profit.

Authorizing the President to commandeer distilled spirits in bond for the manufacture of munitions and other military supplies upon payment of reasonable compensation.

Under the first of these provisions there is an exception in favor of spirits for "governmental, industrial, manufacturing, scientific, or medicinal purposes," which appears to take care of the perfume and allied industries.

The above provisions were voted into the bill in lieu of provisions in the House bill for an absolute prohibition against the use of foodstuffs in the production of "alcohol" except for "governmental, industrial, scientific, medicinal or sacramental" purposes, and a provision that the President might require persons holding alcohol or distilled spirits to turn the same over to the government for redistillation to enter into the manufacture of munitions, etc.

Prohibition propositions are by no means confined to the Food Control Bill. The War Revenue Bill contains the drastic Gore amendment imposing a prohibitive tax upon the materials entering into the production of spirits, at the rate of \$60 per 100 pounds on grain and other solids and \$5 per gallon on molasses and other liquid fermentable products.

It is stated that the effect of this provision if enacted into law, as it is believed it is going to be, would be to transfer the production of distilled liquors to California, as it is understood that grapes and other fruits, etc., used for distillation purposes would not be subject to the "material" tax.

Nor would the "material" tax apply on stuff entering into the production of alcohol for "other than beverage purposes, which would appear to let out the perfume interests.

There are estimated to be about 230,000,000 gallons of distilled spirits in bond in the United States. If seized the government would lose the existing tax of \$1.10 per gallon, as well as the proposed additional tax of \$1.10. It is estimated the government would have to pay \$1.50 per gallon for the liquor. The total cost to the government, therefore, in revenues sacrificed and expense incurred would be \$3.70 per gallon, or an aggregate of \$621,000,000.

The significance of this figure may be realized when it is recalled that the estimated revenue to be derived under the Revenue Bill as first reported to the Finance Committee would be about \$1,670,000,000 a year. Hence the possibility of additional taxes on the perfumery and allied industries is menacing.

Already the bill as it left the Finance Committee provides for the following:

An additional tax of \$1.10 per wine gallon on perfumes imported into the country which contain distilled spirits.

Taxes ranging from 3 to 12 cents per gallon on syrups, flavors and extracts and soft drinks to yield an estimated revenue of \$11,000,000.

Distilled spirits to yield \$105,000,000 additional tax.

Taxes on perfumes, etc., of 2 per cent. of the price for which they are sold to yield \$1,900,000.

A tax in the same amount on drugs and proprietary articles to yield an estimated sum of \$3,400,000.

Taxes on wines, liquors and cordials, etc., to yield \$5,000,000 revenue.

A tax on rectifiers of spirits to yield \$5,000,000.

President Wilson is understood to oppose dealing with the prohibition question in the Food Bill, but it is doubted if he can prevent prohibition legislation on that measure. It is reported that he does not object strenuously to prohibiting the production of distilled spirits and that he is willing to compromise the wine and beer question if Congress wants to meet the situation by empowering him to stop the production of those articles if the food situation and the necessities of war require it. Some persons in touch with the situation at the Capitol think this may be the outcome of the fight over prohibition when the Food Bill gets

through a conference committee of the two houses of Congress, but it will then remain to be seen whether the House will approve the proposition.

The following provisions of the War Revenue Bill may interest the trade:

"Sec. 314. That there shall be levied, assessed, collected and paid

"(a) Upon all prepared syrups or extracts (intended for use in the manufacture or production of beverages, commonly known as soft drinks, by soda fountains, bottling establishments, and other similar places) sold by the manufacturer, producer or importer thereof, if so sold for not more than \$1.25 per gallon, a tax of 3 cents per gallon; if so sold for more than \$1.25 and not more than \$2 per gallon, a tax of 4 cents per gallon; if so sold for more than \$2 and not more than \$3 per gallon, a tax of 6 cents per gallon; if so sold for more than \$3 and not more than \$4 per gallon, a tax of 8 cents per gallon; and if so sold for more than \$4 per gallon, a tax of 12 cents per gallon.

"Sec. 601. (b) Upon all perfumes, essences, extracts, toilet waters, cosmetics, petroleum jellies, hair oils, pomades, hair dressings, hair restoratives, hair dyes, tooth and mouth washes, dentifrices, tooth pastes, aromatic cachous, toilet soaps and powders, or any similar substance, article, or preparation by whatsoever name known or distinguished, upon all of the above which are used or applied or intended to be used or applied for toilet purposes, and which are sold by the manufacturer, importer, or producer, a tax equivalent to two per centum of the price for which so sold; and

"(c) Upon all pills, tablets, powders, tinctures, troches or lozenges, sirups, medicinal cordials or bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters (except those taxed under section three hundred and fourteen of this Act), essences, spirits, oils, and all medicinal preparations, compounds, or compositions whatsoever, the manufacturer or producer of which claims to have any private formula, secret, or occult art for making or preparing the same, or has or claims to have any exclusive right or title to the making or preparing the same, or which are prepared, uttered, vended, or exposed for sale under any letters patent, or trade-mark, or which, if prepared by any formula, published, or unpublished, are held out or recommended to the public by the makers, venders, or proprietors thereof as proprietary medicines or medicinal proprietary articles or preparations, or as remedies or specifics for any disease, diseases, or affection whatever affecting the human or animal body, and which are sold by the manufacturer, producer, or importer, a tax equivalent to two per centum of the price for which so sold."

POST OFFICE "DRY" BULLETIN.

The Post Office Department has issued Liquor Bulletin No. 2, 34 pages, showing the territory to which it has been unlawful since July 1, under Section 5 of the Post Office Appropriation Act approved March 3, 1917, to transmit through the mails matter containing advertisements or solicitations for orders for intoxicating liquor.

Twenty-three States are wholly affected by the Act, and matter containing either advertisements or solicitations for orders for intoxicating liquor are unmailable when addressed to any of the following: Alabama, Arizona, Arkansas, Colorado, Georgia, Idaho, Iowa, Kansas, Maine, Mississippi, Nebraska, North Carolina, North Dakota, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virginia, Washington, and West Virginia.

The following States are partly affected by the Act, and the bulletin shows in detail the territory by cities, towns, or other political subdivisions affected: California, Connecticut, Delaware, Louisiana, Maryland, Massachusetts, Minnesota, New Hampshire, New York, Ohio, and Texas.

The following are affected by the Federal Act at future

ELIMINATING FREE PUBLICITY FROM NEWSPAPERS AND MAGAZINES.

By Louis Wiley, Business Manager, New York Times, in Advertising and Selling

Free publicity is not only illegal but a deception upon the readers of a newspaper. Every newspaper reader has a right to expect that the articles printed in the news columns shall be genuine news. To print advertisements, puffs, statements which are not news, under the guise of news, unless they are labeled as advertisements as required by law, is deceit. Newspapers which practice imposition of this kind always are punished. Both advertisers and readers lose confidence in and gradually desert such publications.

The publication of advertisements under the guise of news is also a violation of business morals. It impairs the integrity of the newspaper. Newspapers are chargeable with lax business morals when they cooperate in doing a thing which does not bear the stamp of the highest standards of newspaper ethics. In the development of the moral sense of newspapers, that which was once regarded as endurable is now looked upon as unjust to advertisers and to readers and unworthy of the newspapers themselves.

dates as follows: Alaska, January 1, 1918; Indiana, April 3, 1918; Michigan, April 30, 1918; Montana, December 31, 1918; and Utah, August 1, 1917.

The following are not affected by the Federal Act: District of Columbia, Florida, Guam, Hawaii, Illinois, Wisconsin, Kentucky, Porto Rico, Missouri, Nevada, New Jersey, Pennsylvania, and Wyoming.

Ethyl alcohol is regarded by the department as an intoxicating liquor within the meaning of the Act, but methyl alcohol, wood alcohol, and denatured alcohol are not so regarded. No ruling is made as to the status of medicine or tonics containing alcohol.

NEW PRICE MAINTENANCE BILL.

Congressman Kelly, of Pennsylvania, has introduced a bill in the House at Washington providing for price maintenance. It is somewhat different in details to the Stephens measure, which has been pending, but never more than temporarily smothered for the last few years. Both the Kelly and the Stephens bills are before Congress, but with the more entrancing issues created by the war it is doubtful if either will get through.

The Kelly bill contains these provisions, in addition to others: The vendor shall not have a monopoly, and shall not enter into price agreements with other producers. Price schedules must be filed with the Federal Trade Commission. Provision also is made for disposal sales. Persons in Washington who have studied the various price maintenance bills are of the opinion that the Kelly bill covers the situation better than the Stephens bill, and therefore are in favor of its passage. Outside of the retail merchants who practice price-cutting there is a general sentiment in favor of price maintenance and eventually Congress will enact some fair and appropriate measure. It is improbable, however, that it will be done at this session.

PREMIUM MEN KEEP UP FIGHT.

The American Manufacturers' Premium Association, comprising those manufacturers who desire the right to pack premium coupons in their own products mean to carry the fight against "bone dry" anti-coupon laws further next year, and possibly to test the laws enacted in five States which prevent them from employing coupons. At their annual meeting in this city recently, plans were taken to keep up the battle until the retailers realize the distinction between "third party" trading stamps and coupons packed and redeemed by the specialty maker himself. The officers elected were as follows:

President, S. A. Kirkman, Kirkman & Son; vice-president, A. R. Shirley; secretary, R. L. Higley, Globe Soap Co.; treasurer, R. G. Fraser; directors—S. A. Kirkman, Kirkman & Son; Russell Colgate, Colgate & Co.; R. L. Higley, Globe Soap Co.; R. G. Fraser; William L. Sweet; A. I. Lewis; Archibald E. Reid; B. T. Babbitt, Inc., and A. R. Shirley.

Among the manufacturers elected to membership were the following: Armour & Co., Chicago, Ill.; B. T. Babbitt, Inc., New York City; Beach Soap Co., Lawrence, Mass.; Brownell-Field Co., Providence, R. I.; Canby, Ach & Canby Co., Dayton, O.; Colgate & Co., Jersey City; Globe Soap Co., Cincinnati, Ohio; Kirkman & Son, Brooklyn; James S. Kirk & Co., Chicago; Lever Bros. Co., Cambridge, Mass.; Los Angeles Soap Co., Los Angeles; McCormick & Co., Baltimore; Rub-No-More Co., Fort Wayne, Ind.; Rumford Chemical Works, Providence; Ryan Soap Co., Cincinnati.

NEW ANTI-TRADING STAMP LAWS.

Anti-trading stamp laws were enacted by the legislatures of Montana and Nevada at this year's sessions. The Montana law imposes a county license tax of \$6,000 a year upon every person, firm or corporation using, or supplying to users, any sort of premium ticket, or placing premium goods with packages of merchandise. No exemption is made in favor of premium-using manufacturers. Each single violation of the law is a misdemeanor, punishable by a fine of from \$25 to \$100, or imprisonment for sixty days, or both.

Under the Nevada law, the county tax costs \$2,000 a year. The law does not apply to goods given as premiums with the sale of merchandise but only to tickets, stamps, and the like, redeemable in premiums. Violation of the act is a misdemeanor.

CENSUS OF MANUFACTURES.

The Abstract of the Census of Manufactures has just been issued by the Bureau of the Census. This inquiry, which related to the calendar year 1914, was made in 1915, and the primary data derived from it was printed at the time in the AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW. The abstract presents, in convenient form, with an alphabetical index, all the information that will be needed by the great majority of persons who have use for the manufacturers' statistics. It gives for 340 separate manufacturing industries statistics relating to number, size, and character of ownership of establishments, with other data.

The abstract is a 722-page volume, bound in cloth. It may be obtained from the Superintendent of Documents, Government Printing Office, Washington, at 65 cents per copy.

FEDERAL CHILD LABOR ACT.

Practically all of our readers are interested to at least small degree in the new Federal Child Labor Act which will go into effect on September 1. This law provides in substance that no producer, manufacturer or dealer shall ship or deliver for shipment in interstate or foreign commerce any article or commodity, the product of any mill, cannery, workshop or manufacturing establishment in which within thirty days prior to the time of the moving of such product in interstate commerce children under the age of fourteen years have been employed, or children between the ages of fourteen and sixteen years have been employed more than eight hours in any day or more than six days in any week, or after the hour of seven o'clock in the evening or before the hour of six o'clock in the morning.

The penalty will be a fine of not more than \$200 for the first offense and not less than \$100 nor more than \$1,000 for each subsequent offense, or by imprisonment for not more than three months or both. The act provides that no person shall be prosecuted for a shipment or transportation of any commodity if he proves a guarantee issued by the original manufacturer or shipper that the law has been obeyed. Police powers are given to the Secretary of Labor to enforce the law.

BUSINESS IS AS USUAL.

After careful inquiry by a special committee the Merchants' Association of New York has declared against taking any action to "keep business going." It finds that the public is buying very much as usual and that there is no need for an agitation against superfluous economy. Certain members of the Merchants' Association suggested that it might be a good thing for the association to begin a "keep business going" campaign. The proposal was referred to a committee consisting of Frank R. Chambers, Ridley Watts and Samuel A. Sicher. The committee says in part:

"It is true that some readjustments in the usual currents of trade have been made necessary by war conditions, and some timidity has naturally resulted in some lines; but there has been no widespread interference with the people's means of subsistence, from whence alone can proceed any substantial and continued obstruction of the normal activities of trade.

"It is our observation that such timidity as has existed is passing; and that the disposition of the people is to continue their normal outlays, except in the matter of food consumption, in which field wise economy is prevalent. Under these circumstances, we think it would be a mistake to undertake a crusade to 'keep business going.' There is no apparent need for such a crusade."

FORMULA ORDINANCE IS INVALID.

A decision of importance to manufacturers and dealers in proprietary or patent medicines has just been handed down by the Appellate Division of the Supreme Court, First Department, New York, in favor of E. Fongera & Co., Inc., Charles N. Crittenton Co. and H. Planten & Son, who asked that the New York Department of Health be restrained from taking steps to enforce sections 116 and 117 of the Sanitary Code. The city will appeal.

This ordinance requires the publication on labels of the ingredients and formulas of so-called patent medicines. The decision holds that "in its present form it is legally objectionable and is invalid."

BABSON'S TRADE OUTLOOK.

Roger W. Babson, the noted statistical and trade expert, in his current outlook, gives the following survey of business conditions, based upon thorough investigation and careful observation of the field:

"War's influence upon business is already evident, but this is only the start. The government contracts simply give an indication of the immense activity to be anticipated. The present frugality toward expensive jewelry, apparel, footwear, and wines is but trifling compared with the tremendous demands which will soon be made upon all producers and distributors of essential goods. Of course, watch should be kept on prohibition, taxation, government control, freight priority, and other radical movements, but **there are positively no signs of any permanent dullness in trade while the war is in progress.**

"From present indications, it seems reasonably assured that hostilities will persist until next spring or such time as the United States is ready to put 500,000 to 1,000,000 trained troops into the field. Whether or not war will continue beyond this point, we would not at present venture even a guess.

"At any rate, everybody should count on a brisk fall and winter business. Activity will be especially keen in optical goods, camp supplies, ship fittings, and other necessities. Credits will be strengthened in these localities, which are energized by government contracts, a list of which will appear in these bulletins.

"It is rumored that the most effective means of combating the submarine is by aeroplanes. Some observers also claim that the war in France is finally to be won by this same means. The Allies are said to be even more anxious for us to supply aeroplanes than men. Certainly there are abundant indications that if this war continues, a tremendous industry in aeroplanes will be developed.

"The crop outlook continues fairly favorable for spring wheat, oats, and corn in the northern regions. Cotton started out with indications for a record breaking acreage.

"Charge accounts of customers registered for conscription are carried by merchants in the retail trade. We do not apprehend the necessity of any extraordinary curtailment of credit, at least for the present. The customer deserving of credit under ordinary circumstances will not deliberately plan to evade his obligations, even in a crisis. Credit men, however, should exercise reasonable foresight in this matter.

"Mercantile Conditions.—What will happen if the government disburses \$6,000,000,000 between now and December 31? This is equivalent to about one-sixth of the total value of all United States manufactures in a whole year; it is equal to about twice the value of our annual mineral production, or two-thirds of the value of our crops. This stupendous sum must be reckoned with in anticipating business conditions during the coming months.

"Of course, all industries and all sections of the country will not be stimulated alike. Those which are most necessary to the prosecution of the war will receive the greatest benefit. The point which we wish to emphasize, however, is that during the coming months there will be opportunities for everybody. As long as the war lasts we shall have a tremendous total volume of business, and high prices will be maintained.

"Monetary Conditions.—During the coming months we shall see the most rapid expansion in bank loans that this country has known since the Civil War. Already the

OUR ADVERTISERS—XXXI.

CARR-LOWREY GLASS CO.,

Baltimore, Md.

Druggists' Chemists' and Perfumers' Glassware.

PERFUMER PUBLISHING CO.,

80 Maiden Lane, New York.

Gentlemen: Referring to our advertisement appearing monthly in THE AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW, would say that the results obtained are very satisfactory. We are enabled to keep before the trade illustrations of our product, and a considerable volume of business comes to us from districts too remote to be reached by our representatives.

Assuring you that it gives us much pleasure to be able to recommend your publication as an advertising medium, we remain,

Yours very truly,

CARR-LOWREY GLASS CO.

banks are finding a heavy demand for accommodation as a result of the \$2,000,000,000 government loan. **This loan, however, is only a "starter" compared with the financing which we shall have to do in the future. A tremendous amount of currency will be required.**

"As the strain on the banks increases they will resort more and more to the privilege of rediscounting their commercial paper with the Federal Reserve Banks, obtaining in return Federal Reserve notes. This will increase the amount of money in circulation, and means inflation with higher prices and greater trade activity."

CRISIS NOW FOR THE JOBBERS.

There is not the slightest doubt of the fact that the jobber, or middle man, as he is sometimes termed, is an important factor in American trade. Whether he also is an indispensable part of business, which is open to argument, will be determined in the next few months by what Mr. Middle Man will do in this war emergency. President Wilson has issued a strong warning against excessive profits and in a manifesto has declared that the entire Nation being on a war basis the Public is entitled to the same reasonable prices which the Government will pay.

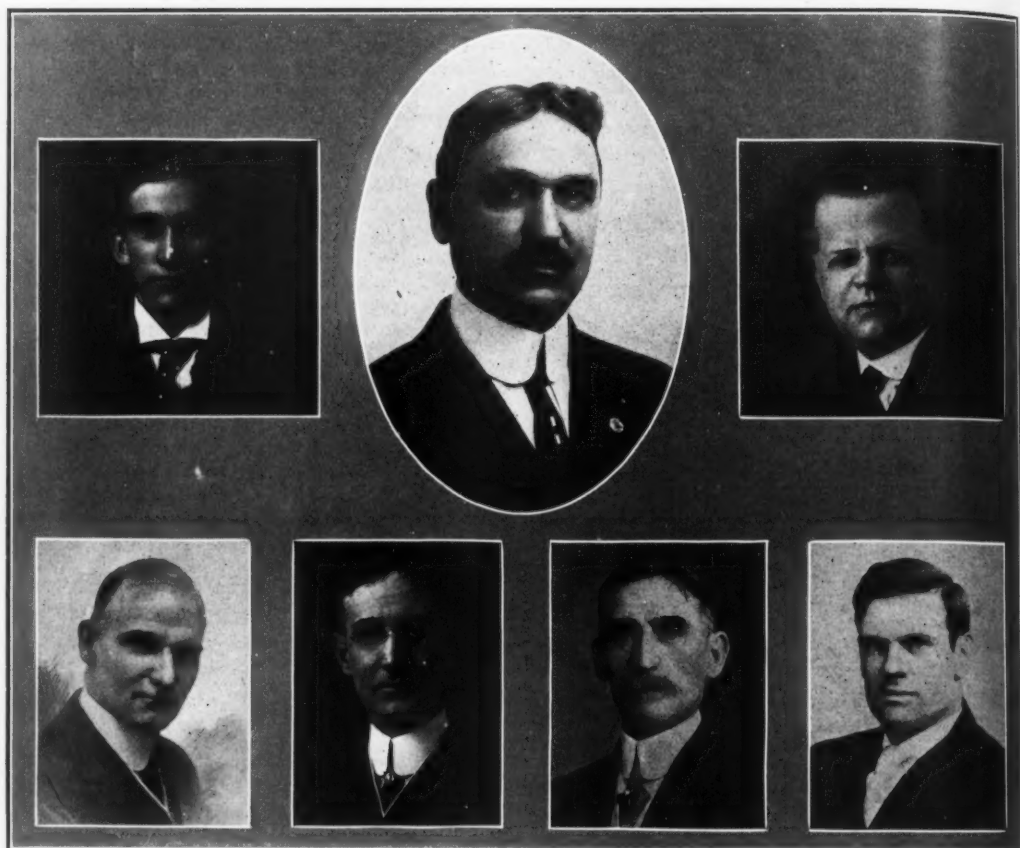
This war is going to cause many upheavals and unless Mr. Middle Man is circumspect and becomes content with fair profits the movement to squeeze him out entirely will gain such impetus that his fate will be sealed.

NEW YORK ALCOHOL RULING STICKS.

C. S. Ferris, acting chief counsel of the New York State Excise Department, has replied to the protest of Drug Trade Section against the ruling that alcohol, no matter for what purpose, could not be shipped into any local option town in New York State. The ruling was originally issued by Commissioner Herbert D. Sisson. He endorses the reply, which in part says:

"We appreciate fully the difficulties that the recent amendments to the Liquor Tax Law impose upon wholesalers who deal in alcohol and pharmacists who are engaged in business in towns where all forms of liquor tax certificates are forbidden as the result of local option, but the only remedy we can see is an amendment to the law."

REPORT OF PROCEEDINGS OF THE EIGHTH ANNUAL CONVENTION OF THE FLAVORING EXTRACT MANUFACTURERS' ASSOCIATION



G. M. DAY, SECY.

F. P. BEERS, PRES.

F. A. ROSS, TREAS.

L. B. PARSONS,
3RD VICE PRES.

W. H. HYDE
EXEC. COMM.

C. D. JOYCE
1ST VICE PRES.

R. E. HEEKIN
2ND VICE PRES.

OFFICERS OF THE F. E. M. A. FOR 1917-18.

President—F. P. BEERS, Earlville, N. Y.

First Vice-President—C. D. JOYCE, Philadelphia.

Second Vice-President—R. E. HEEKIN, Cincinnati.

Third Vice-President—L. B. PARSONS, New York City.

Secretary—GORDON M. DAY, Milwaukee, Wis.

Treasurer—F. A. ROSS, Charlestown, Mass.

Executive Committee (in addition to officers)—F. L. BEGGS, Newark, Ohio; T. W. CARMAN, Springfield, Mass.; R. H. BOND, Baltimore; WILBUR H. HYDE, Cleveland, O.

Attorney—THOMAS E. LANNEN, Chicago, Ill.

The eighth annual convention of the Flavoring Extract Manufacturers' Association of the United States was held at the Congress Hotel, Chicago, Ill., June 27 to 29. The attendance was larger than ever before, important subjects were discussed and the deliberations once more tended toward progress in the industry. The social

features were subjects of commendation and taken in its entirety the assemblage marked another step forward for the organization.

After the usual preliminaries, the association at once plunged into business. With Vice-President Beers in the chair, President Beggs read his annual report. Mr. Beggs first directed attention to the war crisis and then reviewed the work of the executive committee. He continued:

"The last year, like its predecessors, has been filled with many perplexities and problems, but your officers and committees have been faithful in their efforts to meet every situation and have done all that could be done, with the means at their disposal, to advance the interests of our Association.

"During the last eight years many of our manufacturing problems have been successfully solved, our processes have been greatly improved, and our members testify to having received much information that has been of real, practical value and great financial gain.

"Numerous technical questions have been discussed.

many new methods of manufacture have been adopted, waste has been eliminated, efficiency has been increased, sanitation has replaced unsanitary conditions, legal questions have been answered, label requirements explained, unjust and unnecessary legislation prevented, support and aid given to the passage of legislation exacting purer products, cartons and packages have been improved, and the quality of flavoring extracts of today far surpasses the standard or quality of a few years ago.

"While we can show wonderful improvement and co-operation along manufacturing lines, in the marketing of flavoring extracts we are no better off than at the outset; in the selling of our products we have effected no economies, nor have we shown either improvement or progress. This lack of progress and co-operation is, in my opinion, due largely to two reasons.

"First, because our membership is made up of those who sell only to the jobber; those who sell direct to the retailer; and those who sell direct to the consumer. Heretofore, all discussions of our selling problems have been general, and, without common ground or mutual interest, accomplished nothing and was time wasted. The manufacturer who sells to the jobber has no knowledge of the difficulties that beset the manufacturer who has to deal with agents or canvassers in selling direct to the consumer, nor does he know but little more of the trials of the manufacturer who deals direct with the retail trade. Prices, packages, terms, discounts, deliveries and free goods are all at variance, and no conclusion can be reached that will apply equally to all.

"Since the change in our constitution, proposed at Cleveland in 1915, has made it the policy of our Association to admit to membership all those who manufacture Flavoring Extracts regardless of how they market their product, it would appear to be a wise provision to separate our membership into three sections: (a) those who sell to the jobber, (b) those who sell to the retail dealer, (c) those who sell direct to the consumer. Each section could then arrange for meetings at which the selling problems pertaining to the particular method of marketing their product could be taken up and uniformity established upon such matters as might rightly and properly be considered. By this method, many economies might be effected, much valuable information interchanged, and the result a more economic distribution of our products profitable to both manufacturer and consumer.

"The second reason for lack of progress in marketing our product may have been due to the fear that any consideration of these subjects by our membership might be misconstrued as tending to fix prices and in violation of the Federal laws. In my opinion, our error has been in being overcautious. The Federal Trade Commission, awakened by the tendency of many manufacturers to conduct their business without a reliable and accurate cost system, has found it necessary to issue a pamphlet, of which I presume you have received a copy, entitled, 'Fundamentals of a Cost System for Manufacturers.'

NECESSITY FOR ACCURATE COSTS SYSTEM.

"Flavoring Extracts are generally manufactured in connection with other lines, but the manufacturer who decides to conduct his Flavoring Extract business as a separate department, in which exact costs are figured and to which proportionate overhead and selling expenses are charged, usually finds that he has been recovering his loss on extracts by profit on some other line, and, by his own ignorance, suffering unnecessary loss, as well as demoralizing an industry and causing his competitors, who do know their costs, to meet his unprofitable prices or suffer the loss of business. The time will come when competition of this character will be considered as illegal and criminal as any other unfair and unjust method of injuring a competitor, and it might be advisable to call the attention of the Federal Trade Commission to some of these cases.

"The subject has been fully covered in our Bulletins No. 50 and No. 52, but the unusual conditions confronting us at this time is my reason for bringing to your attention a greater necessity for an accurate and reliable cost system than you have ever before known."

President Beggs paid a glowing tribute to Dr. Schlotter-

beck in announcing his untimely death. He referred to the proposed Spice Trade Association merger and to the work of the legislative committee, regarding which he said in part:

"Never before, in the history of this organization, has our Legislative Committee been confronted with so many bills or with legislation of such vital importance to our industry as have been presented for their consideration and action during the past year.

"Mr. R. H. Bond, chairman of this committee, and Mr. T. E. Lannen, our attorney, have devoted almost their entire time to this work while the many legislatures were in session. We were particularly fortunate in having men of such marked ability in charge of legislative matters, and I take this opportunity to publicly acknowledge my appreciation of the able and excellent manner in which this work has been handled and to express my gratitude for the splendid results obtained. A full and complete report will be rendered for your consideration.

SCIENTIFIC RESEARCH.

"At the seventh annual meeting the following resolution was adopted:

"Resolved: That the Scientific Research Committee be continued for another year, and that the matter of arranging to have special scientific research work done for the Association be referred to the Executive Committee, with power to act, but that whatever work is done shall be, as far as possible, of practical commercial value."

"Your Executive Committee considered the advisability of continuing the work along the lines already commenced, but in view of the fact that a complete report had not been received from Mr. Richtman, whose work was unfinished at the time of the last convention, it was not thought advisable to prosecute this work until a complete report had been filed.

"It will be necessary, if further work is contemplated for the coming year, to determine at once the line of investigation or the character of the work desired, select the man and have the work start with the beginning of the school year.

WAR MEASURES AT WASHINGTON.

"Through Circular No. 56 you have been informed of the proposed tax on alcohol as a war measure, and the attitude of your Executive Committee is expressed by the resolution adopted in New York and personally presented to each member of the Ways and Means Committee of the House of Representatives. On May 8, being advised that the Senate Finance Committee would grant brief hearings to each industry affected by the War Measure, I wired Hon. F. M. Simmons, chairman of the Finance Committee, asking for our Association a hearing on the subject of the proposed tax on alcohol as affecting the manufacture of Flavoring Extracts.

"Senator Simmons granted us a hearing and assigned Friday, May 11, as the date. Our attorney, Mr. Lannen, being in attendance at the National Confectioners' Association convention, and Mr. Bond, chairman of the Legislative Committee, being in Texas, I appointed Mr. W. M. McCormick, Mr. Chas. D. Joyce, Mr. John L. Clawson and Mr. C. F. Sauer to meet in Washington and appear before the Senate Finance Committee. As but one representative could be heard, the committee selected Mr. John L. Clawson to speak for them.

"Mr. Clawson made a statement in our behalf, submitted a brief, and presented our views in a very able and satisfactory manner.

"On May 26 I instructed Mr. Lannen to go to Washington and remain until matters were settled, advising him to oppose the gross sales tax on our products and to direct his efforts toward preventing any increase of the present tax on alcohol, to see that no discrimination was made against alcohol for culinary purposes, and to demand for our industry whatever exemptions might be accorded to alcohol for medicinal and industrial purposes.

"This action was taken because our industry is already overburdened with taxation and is now paying more than

its proportion, and any further burden would result in decreased revenue to the government by serious reduction of the volume of our business. It was no part of Mr. Lannen's duty to ask any special favor for our industry, for I do not believe there is a member among you who would not resent the attempt of an officer of this Association to obtain for you any concession to which you are not justly entitled, or to put you in the false position of not willingly and cheerfully paying your full share of the revenue which the government is forced to collect in its hour of need.

"We were of the opinion that if our Senators and Representatives could be made to understand our real problems, they could be brought to see that we have no other source from which to produce our share of the income to prosecute the war than by the exchange of our products for money. And if by unwarranted taxation on alcohol the price of our products is forced so high that consumers cease to purchase pure Flavoring Extracts and instead buy cheap substitutes containing little or no alcohol, our industry will be seriously injured, pure food legislation will take a backward step, and the very end sought, increased revenue, will be defeated.

"I am deeply grateful for the many courtesies and favors shown me by the officers of the association, by the committees, the attorney, and for the loyal support of the members. While I most reluctantly accepted the honor

To the Honorable Woodrow Wilson, President of the United States of America, Washington, D. C.:

The Flavoring Extract Manufacturers' Association of the United States, in convention assembled, individually and collectively pledge to our Government our allegiance and loyalty and our services and resources in any way in which they can be used to the best advantages.

FLAVORING EXTRACT MANUFACTURERS' ASSOCIATION of the United States, by F. L. BEGGS, President.

Regrets from absentees were read, including the following: Paul Rieger & Co., S. P. Hite & Co., A. D. Smack Co., Buckeye Extract Co., Michigan Lithographing Co., Joseph Burnett Co., Clossett & Devers, McFadden Coffee & Spice Co., W. Burton Co., Samuel F. Irwin, Frank Tea & Spice Co., and National Confectioners' Association.

President A. M. Spiehler, of the Manufacturing Perfumers' Association, sent his regrets and in voicing his best wishes for a successful convention took occasion to say:

"I am particularly impressed with the topics under discussion and hope that you will make some progress in these subjects so that the Manufacturing Perfumers' Association also can take them up and thrash them out, and, let us hope, to a definite conclusion."



FRANK L. BEGGS,
Retiring President.



K. H. BOND,
Executive Committee.



THOMAS E. LANNEN,
Attorney.

of serving you during the last year, I now most willingly acknowledge the kindly consideration you have shown me and the helpful co-operation received from all. I ask for my successor the same spirit of helpfulness, to the end that this organization may always be found ready to promote and protect our business interests, foster good will among our membership, and to loyally support our government with our ability, our fortunes, and our lives if necessary, to perpetuate our heritage of liberty and democracy and to guarantee an equal right to the people of all nations."

President Beggs' report was approved unanimously.

The following committees were appointed:

Resolutions—R. H. Bond, Dr. S. H. Baer, S. J. Sherer, W. H. Hyde, F. P. Beers, T. W. Carman, T. L. Keough and Attorney Thomas E. Lannen; Auditing, F. S. Muchmore, R. E. Heekin; Nominations, C. W. Jennings, W. M. McCormick and Louis B. Parsons; Obituaries, H. L. Jenks, George H. Redmond and Dr. F. M. Boyles. H. L. Klingensmith was made sergeant-at-arms.

PLEDGE OF LOYALTY TO PRESIDENT WILSON.

Mr. Bond announced that it was the purpose of the Resolutions Committee at the proper time to offer a resolution pledging the loyalty, thought and service of the association to the Government in the conduct of the war. Meanwhile he moved that the following telegram be sent and the action was unanimous that it go forthwith:

Mr. Bond praised President Spiehler's aid and co-operation on Washington legislation.

S. J. Sherer, chairman of the convention arrangements committee, introduced Thomas L. Keough, the local chairman, who, he said, had "done most of the work." Mr. Keough then outlined the entertainment program.

REPORTS OF STATE COMMITTEEMEN.

Reports were read on state conditions in the extract industry from the following committeemen:

California, Paul Rieger; Missouri, S. W. Noggle; Michigan, C. W. Jennings; New Jersey, F. L. Muchmore; New York, C. H. Stuart; Ohio, C. L. Newton and W. H. Hyde; Pennsylvania, James L. Klingensmith; Wisconsin, E. A. Bergwall.

REPORTS OF THE SECRETARY AND TREASURER.

Secretary Gordon M. Day's report showed there was only one member delinquent in paying the dues for 1916-17. He announced the installation of a card index system and the distribution of a revised membership list. Seven new applications were received in the year and two resignations were accepted, making the membership: Active, 103; associate, 36; total, 139.

Secretary Day, as chairman of the Membership Committee, reported the following new members:

Great Atlantic & Pacific Tea Co., Newark, N. J.
Liquid Carbonic Co., Chicago.

Mihalovitch Co., Cincinnati.

Mihalovitch Bros. Co., 352 W. 3d street, Cincinnati.

Price Flavoring Extract Co., Chicago.

(Represented by E. P. Price.)

Boerner-Fry Co., Iowa City, Iowa.

(Represented by R. L. Price.)

J. B. Lynas & Co., Fort Wayne, Ind.

Treasurer F. A. Ross's annual report showed a balance on hand of \$2,111.26.

ATTORNEY LANNEN'S TRIP TO WASHINGTON.

Mr. Sherer and Mr. Bond both praised President Beggs highly for sending Attorney Lannen to Washington to look out for the interests of the flavoring extract industry without waiting to consult his colleagues on the executive committee. Mr. Lannen next presented a report on the "Legal Status of Contracts Under War Legislation." He discussed the effect of the War Revenue Tax Law on contracts for future delivery after it becomes effective. The only statute on the subject is one enacted in 1864 authorizing the addition to contract prices of any new duties which might be imposed. His opinion, however, was that the manufacturer would have to stand these duties unless he inserted clauses to the contrary in his contracts. The full text of Mr. Lannen's opinion will be sent to the members and will be given in the official minutes.

Dr. Baer suggested that an amendment to the law might be obtained to cover this condition. Mr. Lannen said there would be no harm in trying.

MR. LOWENSTEIN.—With a contract providing for "Subject to Conditions Beyond our Control" can we add that tax on? The tax is surely beyond our control.

MR. LANNEN.—Subject to conditions beyond your control?

MR. LOWENSTEIN.—Yes.

THE PRESIDENT.—I might say the customary definition of conditions, does not cover taxes.

MR. LANNEN.—I would be inclined to say offhand that you would not be relieved there from the tax feature of it under conditions of that kind, unless you specifically named and referred to it. If your wording could be construed so as to give you the right to refuse to fill the order, that would be different.

MR. LOWENSTEIN.—Well, it does say that the buyer does not have to deliver and the seller does not have to accept.

MR. LANNEN.—I should think under those circumstances you would have to have a specific reference there to the taxes.

MR. LOWENSTEIN.—Isn't it a fact that the government will protect anybody having a contract coming to a point of that kind?

MR. LANNEN.—That the Government will protect them? No, I don't so understand it.

MR. LOWENSTEIN.—Any manufacturer could show the taxes would mean serious loss. They were unforeseen taxes, unforeseen conditions.

MR. LANNEN.—The Government wouldn't have anything to do with a contract between you and your customer. The Congress might, if you would go down and convince Congress that unless they took care of a situation of that kind it was going to result in great injury to you and to the trade, they might possibly give you relief, but that is the question we suggested a little while ago, which is to be brought up here by resolution.

THE PRESIDENT.—It seems to me this whole thing simmers down to a point if you have a contract to deliver 100 gross of extracts and it is going to cost you \$5 more per gross to deliver them, it is not "beyond your control" if you are financially responsible for that amount. There is the situation as I see it, and I think any one who attempts to hedge or prevent deliveries on that basis is going to find that the courts will not maintain his position.

MR. HOFFHEIMER.—The National Association of Credit Men, which is an organization of men who go into contracts rather seriously, issued a bulletin about six or eight weeks ago which would bear out what Mr. Lannen said that that is not a protection; in other words, you are bound to fulfill your contract even though it does contain that clause, "Subject to conditions beyond our control." That is their opinion and I think their opinion is rather to be relied upon under the circumstances.

MR. LANNEN.—Now, gentlemen, getting down to my general report as attorney for your Association, I find that I have written opinions upon 951 separate bills introduced in the various state legislatures and in Congress. Now some of those bills were short bills, and you could write an opinion on them in three or four lines. Others of them were long bills, and it took fifteen or twenty or twenty-five pages of paper to cover the opinion alone on those bills. I find that the number of opinions that I have written on those bills and on their amendments—when I speak about the 951 bills, I mean the original bills that came into my office. Now those bills as they moved through Congress or through the state legislatures had to be watched. There were amendments made to them, committee reports on them, and they had to be watched right straight through the legislatures. I find that the number of such opinions that I have written on those bills and on their amendments is 2,111. That is on legislation alone.

In regard to Legislation, I spent seven weeks in Washington last fall from August 23 until October 7, looking after revenue matters down there. At that time the only thing of importance to this Association that came up was a move made there to put a tax of 24 cents a gallon on flavoring extracts. That did not live very long. I sent out a circular at that time to all members of the Association, and I am glad to say that everybody responded admirably, with the result that that amendment was killed on the floor of the Senate by a vote of 41 to 1, as I recall it.

It is my personal opinion that we have a pretty good chance down there to get the \$1.10 extra tax off alcohol used for manufacturing flavor extracts. I can't give you any definite reason why I have that opinion. It is simply an opinion that I have gathered from being on the ground, and from what little impressions I could get here and there in Washington, and I think that if our people will keep up that fight and keep the pressure going down there, that you will have a chance to get your alcohol at the normal tax of \$1.10. It was pretty thoroughly understood, in fact it was absolutely understood while we were down there, that this added tax on grain would not apply to alcohol used for industrial purposes.

The only difficulty about that is that we have to watch it and see that the bill is so worded that it will let us out, and it is going to be some little job to word that law right, so that the distillers will be free to operate to produce the alcohol for us, in order that we may get it at whatever tax Congress allows us to have it at. The bill at the present time stands with a tax of \$2.20 a proof gallon of alcohol.

MR. PARSONS.—That is double the normal tax?

MR. LANNEN.—That is double the normal tax. It also stands about \$60 a hundred pounds of grain used for distilling purposes, and \$5 a gallon on molasses and similar products used for distilling purposes, but there is a proviso in that grain tax to the effect that that shall not apply to alcohol intended for industrial, scientific, mechanical or medicinal purposes. Now the question about that is as to whether or not the word industrial is broad enough to include the manufacture of flavor extracts and perfumes.

When we were down there we had a talk with Senator Gore—when I say "we" I refer to Mr. Bond, Mr. Lachland of the Sauer Company, and myself. We raised that point with Senator Gore. The Senator said, "Why, of course the word industrial covers the use of alcohol for manufacturing flavor extracts and perfumes." He said, "You are an industry, aren't you?" We said, "Yes." We tried to get him to mention specifically flavoring extracts, but we could not get him to see it our way. He said we were covered, amply covered by the wording of the bill as it stands, or rather by the wording of his amendment.

Finally, as a way out of the matter and in order to in-

sure us a little more safety under the bill, we suggested that either he or some other Senator get up on the floor of the Senate when the amendment was pending, and state into the record that it is intended to cover the sale of flavor extracts and the sale of perfume and things of that kind. Personally, I think an explanation of that kind, used in connection with the word industrial, will let us out, so far as the grain tax is concerned.

MR. BAER.—That grain tax is not in the House Bill, but just in the bill as amended in the Senate.

MR. LANNEN.—The bill that is pending before the Senate is the House Bill.

MR. BAER.—I know, but there is nothing mentioned in the House Bill regarding the tax on grain.

MR. LANNEN.—I might explain in regard to that that ever since that House Revenue Bill has gone over to the Senate there have been amendments offered to it. They have been offering amendments to that bill every day, several of them.

MR. CONROY.—Have you any information pertaining to the retailers' exemption on extracts from taxes, the stock in the retailer's hands?

MR. LANNEN.—Why, there is not anything that I know of. In the first place, there is not any tax on flavoring extracts. At the present time the only tax on extracts is a tax on extracts intended for use for soda water purposes. Now I don't know how they are going to enforce that tax, because you take a manufacturer who manufactures, for instance, vanilla extract, the same vanilla extract is used in the soda water industry that is used by the housewife or that is used by the baker or the confectioner.

Mr. Lannen continued his report, which broadened the discussion into state and other matters. The \$1.10 surtax on alcohol interested the members considerably. Mr. Lannen was given a vote of thanks for his report.

REPORT OF THE COMMITTEE ON LEGISLATION.

Chairman Bond, of the Committee on Legislation, made a detailed report showing an enormous amount of work during the year, with ends still unfinished at Washington, due to the delays in Congress. The report gives in detail a comprehensive summary of the legislation proposed, pending and enacted in all of the States, so far as the flavoring extract industry is affected, either directly or indirectly. The full report would fill several of our pages and it will be available for those interested in the official minutes. War revenue legislation receives ample consideration, and the committee has been assiduous in protecting the interests of the trade at Washington. Mr. Bond expresses the belief that "the sessions of the legislatures just adjourned set the high-water mark for legislation affecting our industry."

Mr. DeLatour, of Georgia, addressed the convention on flavoring extract conditions in that state.

REPORT OF THE COMMITTEE ON PUBLICITY.

Chairman McCormick, of the Publicity Committee, made a report that covered much ground in short space. He recommended a newspaper and magazine campaign to educate the public to the fact that pure flavors cannot be made without alcohol, so that the people at large would demand that no fanatical prohibition laws be enacted either in Congress or in the State legislatures to prevent the manufacture and sale of flavoring extracts. Mr. McCormick again urged uniformity of state and national laws in the extract business. He suggested a fund to finance a campaign along these lines which unquestionably would prove of benefit to the industry.

PRESENTATION OF PAPERS TO THE CONVENTION.

"The Outlook for Glass Bottles and Their Probable Prices," on the docket for attention by T. M. Levis, of the Illinois Glass Co., was discussed by H. C. Ward, the

company's Chicago manager. He did not consider the outlook to be very encouraging.

Dr. S. H. Baer, formerly president of the association, read a paper on "War Taxes on Alcohol and the Effect of Such Taxes on the Flavoring Extract Industry." Dr. Baer reviewed the situation in a masterful manner, considering, as he said, that the taxes have not yet been fixed. The paper was fully discussed and a vote of thanks was given to the doctor.

"Vanilla Beans" was the subject of a paper by R. G. Callmeyer, of the Antoine Chiris Co., New York, which was read by Burton T. Bush, president of the company. The war probabilities with reference to bean prices were discussed concisely. Mr. McCormick, Dr. May, Mr. Dean and others took part in a discussion regarding the general utilization and treatment of beans. Samples were exhibited and examined. A vote of thanks was extended to Messrs. Callmeyer and Bush.

"What is a Practical Minimum Retail Price and Size Package for Extracts?" by C. F. Sauer, of Richmond, next occupied the attention of the convention. Mr. Sauer spoke of the difficulty he had experienced in trying to get extract makers to take up the question of costs seriously. Mr. Bond read his report which dealt with prices, conditions in the trade and remedies for existing evils. Mr. Sauer, on behalf of his firm, offered to head a subscription list with \$250, to be the fund to be devoted to "employing some one who has the knowledge of costs of various commodities to visit the different manufacturers and talk the matter over with them." The information thus gained would be strictly confidential and the results would only be used in a general way for the benefit of the association.

Mr. Heekin and other members commented very favorably on Mr. Sauer's \$250 offer, but the consensus was that his inquiry ought to be made at association expense.

"Outlook for Essential Oils" was handled admirably by W. H. Shellman, of the M. L. Barrett Co.

W. O. Richtman, of the University of Wisconsin, who had collaborated with Dr. Kremers on "Citrus Oils," presented his final report on the subject. An interesting talk followed, in which the tests were discussed.

"Future of Terpeneless Extracts," by B. H. Harrison, of Chicago, next engrossed the convention. A vote of thanks was given him for his clear presentation of the subject.

"Standardization of Trade Methods, Discounts, Free Goods, Consignments, Allowances, etc.," was the subject of a paper by John L. Clawson, of Philadelphia. Mr. Clawson, on account of his wife's illness, was unable to be present. In his absence the paper was read by the secretary. It was a strong argument for standardization and was favorably commented upon in the discussion which followed.

"Possible Economy in the Marketing of Flavoring Extracts" was the subject of a talk by Dr. G. H. Redmond. He had been expected to present a paper, but instead delivered an extremely interesting address on the subject.

SPICE TRADE ASSOCIATION MERGER TABLED.

A report from the Spice Trade Association merger committee, Charles D. Joyce, John L. Clawson and E. Hornbeck, was approved. The committee decided it would be unwise to attempt the merger at the present time and recommended that "this matter be held in abeyance until such time as trade conditions are more nearly normal."

REPORT OF COMMITTEE ON RESOLUTIONS.

Chairman Bond then made the report of the Committee on Resolutions. The following were adopted:

Resolved, That Section 4 of Article 8 of the By-laws be amended so as to read as follows:

"The Secretary shall keep a record of the proceedings of all meetings held by the Association and the Executive Committee, and under their respective directions shall conduct all correspondence and issue all necessary notices to members and upon his retirement from office shall deliver to his successor, or if none be elected, shall deliver to the President of the Association, all books and other properties of the Association in his custody. He shall also collect all dues and accounts and moneys owing to the Association and turn same over to the Treasurer of the Association. The Secretary shall give bond in the sum of one thousand dollars, the premium on which shall be paid by the Association. In his absence the President shall appoint a secretary pro tem."

Resolved, That Section 1 of Article 1 of the By-laws be amended so as to read as follows:

"The membership of this Association shall consist of the incorporators named in the certificate of incorporation, and such other individuals, firms and corporations engaged in the manufacture and sale of flavors, flavoring extracts, colors or sirups as may upon application for membership be accepted by a two-thirds vote of the Executive Committee, subscribe to the Constitution and By-laws and whose initiation fee shall accompany such application, and who shall pay dues and assessments as hereinafter provided for."

Resolved, That we affirm our loyalty to the Government of the United States and to our President, Woodrow Wilson, and that we pledge our services, our influence and our resources to the end that American ideals may be upheld and that freedom may not perish from the earth.

Resolved, That the Flavoring Extract Manufacturers' Association of the United States telegraph to the Chairman of the Finance Committee of the Senate of the United States the following message:

"We beg to advise you that the Flavoring Extract Manufacturers' Association of the United States assembled here in its Eighth Annual Convention, has just had the following resolution which we ask you kindly to read to your Committee for its careful consideration:

"Resolved, That the Flavoring Extract Manufacturers' Association of the United States in convention assembled telegraph to the Finance Committee of the United States Senate the following message: We have as an industry for years been contributing more than our share in taxes, because over fifty per cent of the cost of flavoring extracts goes in taxes to the Federal Government. This does not include corporation or income taxes, which are in addition thereto. We therefore earnestly protest against the imposition of the proposed increase tax of \$1.10 per proof gallon on the alcohol used in flavoring extracts, as it would be prohibitive and confiscatory, and in our opinion would produce less revenue from the manufacture of flavoring extracts than the present normal tax of \$1.10 per proof gallon."

Resolved, That the Executive Committee be empowered to consider and adopt a uniform design to be used by members on stationery, for the purpose of showing their membership in this Association and that the membership be requested to use such design.

Whereas, We believe that comparisons of costs among our membership will tend to point out errors and enable our members to make corrections and thereby arrive at a proper system of cost accounts; therefore, be it

Resolved, That the President shall from time to time request from the individual members statements of their costs on flavoring extracts, giving in specific detail what constitutes such costs and how determined and that this information be issued in a series of bulletins to our membership and that they be requested to check their costs against same and report to the President such variations as may exist between such members' costs and those submitted in such bulletins, it being understood that the names of the members whose costs are submitted in such bulletins shall not be divulged.

Whereas, There are introduced in the various state legislatures from time to time bills designed to confine the sale of flavoring extracts, patent or proprietary medicines and the ordinary household remedies to registered pharmacists, thus taking a trade fight into the halls of the legislature in an endeavor to create a monopoly in the sale of this class of goods; and

Whereas, This class of legislation serves no good purpose, is unwise and unfair; therefore, be it

Resolved, By the Flavoring Extract Manufacturers of the United States in convention assembled that such legislation be condemned as pernicious, monopolistic, unnecessary, unwise and contrary to the public welfare, and that an endeavor be made to enlighten the public as to the motive behind this class of legislation in order that it may not prevail.

Resolved, That the AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW be appointed as our official organ for the next year, subject, however, to the right of other trade papers to publish such notices and documents as the Association may see fit to send to them.

Resolved, That our sincere thanks and appreciation be extended to the other trade organizations who have collaborated with us in our legislative work to the mutual advantage of the trade and the general public.

Resolved, That the thanks of the Association be extended to the AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW, *Simmons Spice Mill*, and the *Tea and Coffee Trade Journal*, for the publicity given the work of the Association and for the support which they have given us.

Resolutions were adopted thanking the officers, the entertainment committee, the Congress Hotel and the speakers at the convention and at the banquet.

Dr. Redmond, of the Committee on Obituaries, reported suitable memorial resolutions on the deaths of Dr. Julius O. Schlotterbeck and Mr. Alois von Isakovics.

WORK OF RESEARCH COMMITTEE TO BE CONTINUED

Mr. McCormick, Dr. Redmond, Dr. May, Dr. Boyles, Mr. Harrison, President Beggs, and others spoke of the importance of the research work done by the association.

A motion was passed authorizing the Executive Committee to continue the work of the Research Committee, if the funds will permit, leaving the character of the work to be determined by the Executive Committee.

Chairman Jennings presented the report of the Nominations Committee and the ticket was elected as given on page 132, except that Mr. Sherer, named for National Councilor, suggested it would be better to leave that office open subject to appointment by the new president. The president also will appoint the state committeemen.

Retiring President Beggs then welcomed President Beers to the chair. The new officers took oath to faithfully perform their duties.

A suggestion by Mr. Muchmore that a contribution be made to the Red Cross was referred to the Executive Committee.

Arrangements were made for trade conferences of the members. These were split into three sections: 1, for those members who sell to jobbers and retailers; 2, for those who sell to retailers exclusively; 3, for those who sell to the consumers only.

The Question Box, which started discussions on various trade problems, proved an interesting feature. When these subjects had been cleared up, the convention dispersed, amid hearty pledges of co-operation for the new administration.

The Social Features and Banquet.

Chicago members of the association, on the entertainment and other committees, were assiduous in their attentions to the visitors. Bad weather prevented the auto-

THE AMERICAN PERFUMER

mobile ride, but the theater party was much enjoyed. The members saw "Turn to the Right" at Cohan's Grand Opera House on the evening of June 27.

The eighth annual banquet was served on the night of June 28 in the Florentine Room of the Congress Hotel. The menu presented an appetizing variety, and the speeches were timely and appreciated. President Bggs presided and the orators were State's Attorney Maclay Hoyne, Judge Adelor J. Petit, of the Criminal Court, and Robert M. Sweitzer, County Clerk of Cook County. Else Harthan-Arendt, vocalist, entertained with songs.

Hallock-Denton Co., Newark, N. J. F. S. Muchmore.
Chr. Hansen's Laboratory, Little Falls, N. Y. J. D. Frederickson, M. H. Meyer.
S. P. Hite Co., Roanoke, Va. B. J. Fishburne.
Jennings Mfg. Co., Grand Rapids, Mich. C. W. Jennings.
W. W. Fox.
Jewel Tea Co., Chicago, Ill. A. W. Delatour, F. B. Hinrichs.
H. A. Johnson Co., Boston, Mass. W. C. Whitman.
Liquid Carbonic Co., Chicago, Ill. H. E. Harrison.
J. B. Lynas & Sons, Logansport, Ind. Geo. H. Lynas.
Maury-Cole Co., Memphis, Tenn. J. E. Maury.
McCormick & Co., Baltimore, Md. W. M. McCormick.
R. H. Bond, F. M. Boyles.



(ABOVE) EDW. TRIPPE, J. N. LIMBERT, E. S. BUCKLEY.

(B L W) W. H. SHELLMAN, JOHN BUSLEE, R. H. LINGOTT, F. B. HINRICH.

(ABOVE) C. F. SAUER, R. C. PRICE

(BELOW) B. F. HARRISON, J. B. DAY

(ABOVE) A. G. SPILKER

(BELOW) H. PULVER, D. T. LUM, CHAS. PFAFF.

Active Members Present.

Arbuckle Bros., Chicago, Ill. H. H. Harrison.
Baker Extract Co., Springfield, Ohio. T. W. Carman.
S. F. Baker & Co., Keokuk Iowa. F. L. Dewees.
Blanke-Baer Chemical Co., St. Louis, Mo. Dr. S. H. Baer.
C. L. Cotton Co., Earlville, N. Y. F. P. Beers.
Crescent City Carbonating Co., New Orleans, La. H. R. Stephens.
Davis Mfg. Co., Jellico, Tenn. G. C. Davis.
Day-Bergwall Co., Milwaukee, Wis. G. M. Day, E. A. Bergwall.
Durand & Kasper Co., Chicago. I. C. Souders.
William Edwards Co., Cleveland, O. A. G. Shumacher.
Foley Bros. & Quinlan, St. Paul, Minn. E. H. Wetherbee.
Fred Fear & Co., New York. Leo Green, G. Lowenstein.
Foote & Jenks, Jackson, Mich. H. L. Jenks, Jr., C. R. Foster.

McMonagle & Rogers, Middletown, N. Y. F. S. Rogers.
Mihalovitch Bros. Co., Cincinnati, Ohio. Clarence Mihalovitch.
Newton Tea & Spice Co., Cincinnati. C. S. Newton.
Pittsburgh Food Products Co., Pittsburgh, Pa. J. L. Klingensmith.
Price Flavoring Extract Co., Chicago, Ill. R. C. Price.
E. P. Price, A. C. Fischer.
Royal Remedy & Extract Co., Dayton, O. J. E. Martin.
Abner Royce Co., Cleveland, O. W. H. Hyde.
C. F. Sauer Co., Richmond, Va. C. F. Sauer.
Seeman Bros., New York. L. B. Parsons.
Scherer-Gillett Co., Chicago, Ill. S. J. Scherer, J. H. Redmond.
J. Hungerford Smith Co., Rochester, N. Y. J. R. Dean.
Stickney & Poor Spice Co., Boston, Mass. F. A. Ross.
Styron-Beggs Co., Newark, O. F. L. Beggs.
Thompson & Taylor Spice Co., Chicago. Geo. E. Hurd.
Widlar Co., Cleveland, O. Sidney May, W. J. Conroy.

Associate Members.

M. L. Barrett & Co., Chicago, Ill. M. L. Barrett, W. H. Shellman.
 W. J. Bush Co., Inc., New York. T. L. Keough, Chicago; Dr. R. S. Swinton, New York.
 Antoine Chiris Co., New York. B. T. Bush, New York;
 R. H. Lingott, Chicago; W. C. Maginnes, Boston.
 Commonwealth Chem. Corp., Hoboken, N. J. R. M. Milbrat.
 J. B. Day & Co., Chicago, Ill. J. B. Day.
 Dodge & Olcott, New York. Wm. A. Susanke, Chicago; Henry Beck, Chicago.
 Alex Fries & Bro., Cincinnati, O. A. M. Hoffheimer, S. Heimes.
 Fries & Fries, Cincinnati, O. Frank Alton.
 Fritzsche Brothers, New York. B. F. Zimmer, M. B. Zimmer.
 Heine & Co., New York. F. E. Toennies, New York;
 D. A. Bennett, Chicago.
 Illinois Glass Co., Alton, Ill. A. C. Ward.
 H. Kohnstamm & Co., New York. Hugo Pulver.
 J. N. Limbert & Co., Philadelphia, Pa. J. N. Limbert.
 Ed. Long Chemical Co., Chicago, Ill. Ed. Long.
 Geo. Lueders & Co., New York. H. Bartold, D. T. Lum.
 H. Marquardt & Co., New York. C. A. Smeltzer.
 Monsanto Chemical Works, St. Louis, Mo. B. M. Covault.
 National Aniline & Chemical Co., Chicago, Ill. J. E. Wolfe, John Buslee.
 Rockhill & Vietor, New York. Chas. Pfaff.
 Ungerer & Co., New York. A. G. Spilker, Chicago; E. Tripp, Philadelphia.
 Union Distilling Co., Cincinnati, O. J. G. Drinkuth.
 Thurston & Braidich, New York. E. S. Buckley.

Visitors.

A. C. Drury, Chicago; S. C. O. Dicken, Chicago. E. J. Brach & Sons.
 F. J. M. Miles, Chicago. Melba Mfg. Co.
 C. A. Rindell, Chicago. Addison Litho Co., Rochester, N. Y.
 R. G. Gould, Chicago. American Food Journal.
 L. J. Zollinger, Chicago. Hydrox Co.
 F. E. Ringenberg, St. Louis. F. B. Chamberlain Co.
 Geo. F. Merrell, Chicago. Allen B. Wrisley Co.

PURE FOOD AND DRUG NOTES

In this section will be found all matters of interest contained in FEDERAL AND STATE official reports, etc., relating to perfumes, flavoring extracts, soaps, etc.

FEDERAL.

Notices of Judgment Given Under Pure Food and Drugs Act by the Secretary of Agriculture.

Among the Notices of Judgment given under the Federal Food and Drugs Act, Nos. 4701 to 4800, inclusive, sent out since our last report by the Bureau of Chemistry, Washington, D. C., the following are of interest to our readers:

4704. Adulteration and misbranding of oil of wintergreen leaf. Plea of guilty. Fine \$5. The article was labeled: "Oil Wintergreen Leaf." Analysis of a sample of the article by the Bureau of Chemistry showed the following results:

Bead test: Positive.
 Vanillin test: Positive.
 Rotation in 100 mm. tube at 20° C. (°V.)..... -0.19
 Specific gravity 15.6° C./15.6° C..... 1.1879
 Esters, as Methyl salicylate (per cent.)..... 98.9

Adulteration of the article was alleged in that methyl salicylate, derived from a source other than wintergreen leaves, had been mixed and packed with the article so as to lower or reduce the quality and strength. Misbranding

was alleged because the statement on the label was false and misleading.

4723. Adulteration and misbranding of vanilla extract. U. S. vs. a corporation. Plea of guilty. Fine, \$50. The article was labeled: "Confectioners' 'B' Vanilla Extract. Made from Pure Vanilla Bean. Contains 33 per cent. Alcohol. Guaranteed by ———, under the Food & Drugs Act, June 30, 1906. Serial No. ——. Analysis of a sample by the Bureau of Chemistry showed the following results:

Vanillin (gram per 100 cc).....	0.06
Resins	Small amount
Lead number	0.35
Color value of extract:	
Red	10.0
Yellow	42.3
Color value of lead filtrate:	
Red	0.6
Yellow	3.1
Percentage of original color in lead filtrate:	
Red	6.0
Yellow	7.3
Alcohol (per cent by volume)	33.60
Acidity (cc N/10 acid per 100 cc).....	25.
Ash (gram per 100 cc).....	0.25
Soluble ash (gram per 100 cc).....	0.19
Insoluble ash (gram per 100 cc).....	0.06
Alkalinity of soluble ash (cc N/10 acid per 100 cc) ..	19

A dilute vanilla preparation.

New Regulation on Marking Food Packages.

Regulation 29, relating to the marking of the quantity of food in package form, as amended by Food Inspection Decisions 154, 157, 163 and 168, has been issued by the Department of Agriculture. The regulation co-ordinates and eliminates discrepancies in the four decisions and sets forth the requirements of the department so that there can be no misunderstandings. The text of the new regulation follows:

STATEMENT OF WEIGHT, MEASURE, OR COUNT.

(Section 8, paragraph 3, under "Food," as amended by act of March 3, 1913.)

(a) Except as otherwise provided by this regulation, the quantity of the contents, in all cases of food, if in package form, must be plainly and conspicuously marked, in terms of weight, measure, or numerical count, on the outside of the covering or container usually delivered to consumers.

(b) The quantity of the contents so marked shall be the amount of food in the package.

(c) The statement of the quantity of the contents shall be plain and conspicuous, shall not be a part of or obscured by any legend or design, and shall be so placed and in such characters as to be readily seen and clearly legible when the size of the package and the circumstances under which it is ordinarily examined by purchasers or consumers are taken into consideration.

(d) If the quantity of the contents be stated by weight or measure, it shall be marked in terms of the largest unit contained in the package, except that, in the case of an article with respect to which there exists a definite trade custom for marking the quantity of the article in terms of fractional parts of larger units, it may be so marked in accordance with the custom. Common fractions shall be reduced to their lowest terms; decimal fractions shall be preceded by zero and shall be carried out to not more than two places.

(e) Statements of weight shall be in terms of avoirdupois pounds and ounces; statements of liquid measure shall be in terms of the United States gallon of 231 cubic inches and its customary subdivisions, i. e., in gallons, quarts, pints, or fluid ounces, and shall express the volume of the liquid at 68 degs. F. (20 degs. C.); and statements of dry measure shall be in terms of the United States standard bushel of 2,150.42 cubic inches and its customary subdivisions, i. e., in bushels, pecks, quarts, or pints, or, in the case of articles in barrels, in terms of the United States standard barrel and its lawful subdivisions, i. e., third, half, or three-quarters barrel, as fixed by the act of March 4, 1915 (38 United States Statutes at Large, page 1186); Provided That statements of quantity may be in terms of metric weight or measure. Statements of metric weight should be in terms of kilograms or grams. Statements of metric measure should be in terms of liters or centiliters. Other terms of metric weight or measure may be used if it appears that a definite trade custom

(Continued on page 152.)

THE FUTURE OF TALCUM POWDER

By JULES SMUCKER, Sales Manager, Metal Package Company, Brooklyn, N. Y.

The talcum powder business has reached the stage where the manufacturer is confronted with a very serious condition as regards the selling price to the consumer.

For two years the costs of all raw materials gradually advanced until now the manufacturers are paying from twenty-five to one hundred per cent. more for supplies. The immediate future does not give any promise of relief; in fact, the tendency is for still higher prices, and with this staring the manufacturer in the face there seems no alternative other than a general advance in selling price. The actual necessity for an advance is so self evident that the sooner it is an accomplished fact the better it will be for all. sooner it is an accomplished fact the better it will be for all. other lines of industry that higher prices must prevail and no more opportune time could be found than the present for the talcum manufacturer to advance his.

Talcum powder as a household necessity is now fully recognized and finds a hearty welcome in every home; and it follows that in the revision of prices that the manufacturers must keep before them the danger of curtailing its general use. With the many usages of these goods and the far greater possibilities of increase, it becomes all the more of a necessity for each manufacturer to recognize that in offering his goods to the public the quality must not be sacrificed of either the finished product or the container.

Probably no business has had to depend on the attractiveness of the package as much as talcum manufacture. The advance in the art of making tin containers during the past ten years has been marked. Numerous styles have

been devised and with the lithographic art being developed to its present stage it is possible for almost any color effect to be duplicated.

The package cost being one of the chief items in marketing talcum, many suggestions are being made as to how this cost can be kept down. It necessarily follows that it can be done only by sacrificing the attractiveness of the container, and with established brands this thought can not be entertained. It follows as a matter of course that the only alternative is a general advance in price on the finished article. For the past two years the public have seen this take place in all lines and are therefore in a receptive mood to recognize the necessity for higher prices for talcum. Just why members of the perfumery trade should feel called upon to shoulder all these increased costs is a hard matter to determine. However, the facts stand out that time has come when a radical change in conditions must take place. It is no longer possible for money to be made on talcum powder at existing prices, and where the future holds out the almost positive fact of further increase of prices for raw materials, it behooves the manufacturers of talcum powder to revise existing conditions.

Surely an industry that has grown to the proportion where over one hundred million packages are consumed yearly is not going to make the error of not profiting by the same, and will show the high business caliber that has created this great new industry. This can be done by advancing prices to where the further development of the business will be in keeping with that of the past.

ENGLAND'S SYNTHETIC PERFUME POSSIBILITIES.*

By Ernest J. Parry, B. Sc., F. I. C.

[Prior to the war the manufacture of synthetic perfumes, largely from coal tar derivatives, was steadily increasing in quantity and broadening in scope. The following study on the possibilities by an English authority, portrays, to a great extent, the nature of the problem to be faced, if American chemistry creates its own independent, artificial perfume industry.—Ed. Chem. Eng.]

In considering the degree of success which has been, or is likely to be attained in the manufacture of synthetic perfumes in this country, a proper conception of the meaning of "synthetic perfume" is absolutely necessary.

There are three different classes of bodies to which this term is applied indifferently by the layman, and more or less carelessly by the expert. To each of these three classes entirely different considerations apply. In the first place there is the true synthetic perfume, that is, one that has been built up from comparatively simple substances by chemical means. Secondly, there is a group of artificial perfume bodies, which, truly, are synthetic, but not in the same sense as the first class. They are bodies which by more or less simple chemical means are manufactured from other compounds, complex in their nature, which are found already existing in other perfume materials. The third class, which may be dismissed without serious consideration, are merely mixtures of natural with synthetic perfumes.

TWO PRINCIPAL CLASSES.

The two serious classes of synthetic perfumes may be illustrated by the following examples. Benzaldehyde, a

synthetic manufactured from coal-tar products, is a faithful representative of the almond odor; phenylethyl alcohol is also made from coal-tar sources, and is an indispensable ingredient in artificial rose odors. These and hundreds of others belong to the first group above mentioned. But clove oil contains a substance, eugenol, in itself of very complex constitution, which can be transformed by chemical means into vanillin, the true artificial representative of the vanilla odor. The essential oil of the lemongrass contains citral, which is, in similar manner, transformed into ionone, the basis of all the artificial violet perfumes.

Now in dealing with these two groups of synthetic perfumes, the following points have had considerable influence on the question of manufacture in this country. There is in the first instance the lack of skilled labor available; secondly the lack of co-operation; and thirdly the lack of experienced business men with a full appreciation of the value of the trained technical chemist.

There have been highly successful attempts to manufacture a number of these synthetic perfumes, and those firms who have undertaken their manufacture will no doubt reap a rich harvest later. But efforts to manufacture one or two of these articles are hardly likely to be successful, as the expense of rent, wages, and plant cannot be met unless the factories are working regularly on a number of bodies, and so ensuring a continual output and turnover of capital.

Taken as a whole, this country has not placed itself in a position seriously to compete with the German trade in

* From the *Chemical Engineer*, June, 1917.

these articles, nor, except in a few isolated cases, have serious attempts been made to do so. The industry is a large one, and an attempt to capture a share of it should be made by British manufacturers. But it is a business in which nothing but the highest skill and incessant industry will ever win success. So far as one can foresee, a much closer co-operation between the technical chemist with special knowledge of the subject and the business man who is intent on building up this industry is necessary. Committees of pure scientists, Government subsidies, and the like are all very well, but will not be the *sine qua non* of success. The business man must realize the inter-dependence of many branches of chemical industry and must realize that German success has been built up by using to the full this inter-dependence under the advice of armies of skilled chemists.

The want of raw materials, such as benzyl chloride, benzaldehyde, the cresols, magnesium, potash, and many others, has, of course, seriously handicapped the starting of this and similar industries, and Germany had created almost a monopoly for herself in these and many other articles. The electrolysis of our salt produces the chlorine, and we have a good supply of toluene in our coal-tar. These two bodies will produce all the benzyl chloride we require, especially as the conditions become more normal. And careful examination will show that all raw materials can be obtained by the proper exploitation of our resources.

There are no valid reasons why the synthetic perfume industry should not be as large in England as it bids fair to be in France. At present, unfortunately, the actual efforts made, important and successful as they are, are not commensurate with the possibilities of this attractive branch of chemical manufacture. In France there has been formed, under the auspices of the Ministry of Commerce, an "office of chemical and pharmaceutical products," whose work in moderating the effects of the shortage of raw materials and in generally assisting the development of the chemical industries is very highly appreciated. When one considers the enormous expansion in chemical works and apparatus that the manufacture of explosives has rendered necessary in this country, the thinking chemist is astonished at the lack of foresight in considering what the future of these works is to be.

ESSENTIAL OILS AND IMMUNITY.

From very ancient times various aromatic and pungent substances have been regarded as possessing prophylactic powers in some measure. It is curiously interesting, therefore, to learn that modern bacteriologists have discovered that in certain cases of infectious disease some of the essential oils such as those of cinnamon, cloves, mustard, garlic, thyme, and marjoram, not only possess bactericidal power, but may even be made to confer immunity when injected like serums. Certain investigations of this highly complex subject recently made by Mr. F. d'Herelle of the Pasteur Institute are reported in the *Bibliothèque Universelle* (Lausanne). He said:

"There is a bacillus belonging to the group of the paratyphics, the *bacillus typhi murium*, which is naturally pathogenic for white mice. Many attempts have been made to render it inoffensive for these little creatures by vaccinating them with a product containing dead bacilli; but the project has always failed though attacked in the most various fashion.

"Mr. d'Herelle then asked himself whether this failure was not due to the manner in which the bacilli had been killed, and, therefore, sought some new method. In the course of his investigations it occurred to him to kill the bacilli meant to serve as a vaccine by means of essences (essential oils), as had been done by Mr. E. Roux. This process has the advantage, according to the eminent bacteriologist, of not altering the albuminoid matters and the diastases contained in the substance of the microbes. . . . No attempt had hitherto been made to prepare vaccines with bacilli killed by essences. Mr. d'Herelle found by experiment that vaccines thus prepared from the essences of cinnamon, garlic, thyme, marjoram, cloves, and mustard were active in certain conditions.

"Thus a white mouse into which is injected a vaccine containing from 500,000 to 10,000,000 corpses of bacilli slain by the essence of mustard is immunized against mortal, and even very 'super-mortal' doses of the living bacilli. But these limits must be maintained with great care in order to obtain immunity, and care must be taken to give a stronger dose to a young mouse than to an adult. For if the dose of 10,000,000 be surpassed, the immunity obtained is very feeble, with little resisting power, and the more the dose is surpassed the weaker the immunity, apparently. On the other hand, the dose must consist of not less than half a million, thus a dose of 150,000 bacilli confers no immunity. It is also useless to try to obtain immunity with a number of successive doses, superior to 10,000,000; the result is *nil*, as if one had done nothing. To resume, the essence of mustard gives a very active vaccine, in this particular case, against hundreds of mortal doses of virus, provided the immunizing doses are confined within the given limits."

AMERICANS INCREASE PURCHASES OF ABYSSINIAN CIVET.

[Consul Addison E. Southard, Aden, Arabia.]

The increasing exports of civet from Aden to America have attracted attention, and the American consulate has investigated the sources of supply. In normal years the average annual exports of civet from Aden are valued at \$45,000, but since the war began the amount has been smaller. In 1914 the exports to the United States were approximately 3½ per cent. of the total amount handled in this market, and in 1916 were approximately 60 per cent. of the total, with a value of \$21,238. France formerly bought the bulk of the civet at Aden, besides taking considerable quantities from Jibuti, in French Somaliland. Practically all the exports from Aden go to the United States, France, and Egypt. A small amount goes annually to the United Kingdom.

As far as can be learned, all of the civet entering into the commerce of this district comes from the highlands of Abyssinia, where the keeping of civet cats is a recognized and established industry. Most of the commodity comes out through Jibuti, although a small quantity is received by way of British Somaliland ports. Some of it is exported direct from Jibuti, but larger quantities come to Aden for export to Europe and America.

The civet cat thrives in the northern part of Abyssinia, particularly in the districts of Shankalla and Malaga, where the climate is comparatively cool. Those who are interested in the industry say that the cat does not do

(Continued on page 142.)

PRICE PROBLEMS OF PERFUMERS

One of the most important arguments in relation to the position of manufacturers of perfumery, toilet goods, etc., is given in the form of a comparison of costs supplies as shown by the books of a prominent New York house for June, 1914, and June, 1917. It was compiled at the suggestion of A. B. Calisher, treasurer of the Manufacturing Perfumers' Association, and is certified by the New York Auditing Company. This data is of great interest as showing the tremendous difficulties under which these industries are laboring at present, regardless of any additional burdens that may be imposed on them by Congress in the form of war taxes. Copies have been sent to W. L. Crounse for use with the Congressmen. The figures speak for themselves:

SCHEDULE "A"—PERFUMERY BOTTLES, CORKED.

June 19, 1914.	June 17, 1917.	Percentage Increase.
1/4 Oz. \$2.00 per Gross	1/4 Oz. \$3.50 per Gross	75%
1/2 " 2.00 " "	1/2 " 3.50 " "	75
1 " 2.40 " "	1 " 4.25 " "	77
2 " 3.00 " "	2 " 5.50 " "	83
4 " 3.65 " "	4 " 6.50 " "	78
8 " 4.75 " "	8 " 9.00 " "	90
16 " 7.00 " "	16 " 12.00 " "	72

PERFUMERY BOTTLES, GLASS-STOPPERED.

June 19, 1914.	June 17, 1917.	Percentage Increase.
1/4 Oz. \$5.00 per Gross	1/4 Oz. \$8.35 per Gross	67%
1/2 " 5.00 " "	1/2 " 8.35 " "	67
1 " 5.50 " "	1 " 9.00 " "	64
2 " 6.25 " "	2 " 9.50 " "	52
4 " 7.00 " "	4 " 12.50 " "	79
8 " 8.57 " "	8 " 16.70 " "	95
16 " 11.50 " "	16 " 21.35 " "	86

TOILET WATER BOTTLES, CORKED.

June 19, 1914.	June 17, 1917.	Percentage Increase.
2 Oz. \$3.00 per Gross	2 Oz. \$5.50 per Gross	83%
4 " 3.65 " "	4 " 6.50 " "	78
8 " 4.75 " "	8 " 9.00 " "	90
16 " 7.00 " "	16 " 12.00 " "	72

SCHEDULE "B"—ESSENTIAL OILS AND AROMATIC CHEMICALS.

June, 1914.	June, 1917.	Percentage Increase.
Almond Oil Bitter..... \$4.00 per Lb.	\$12.50 per Lb.	212%
Amyl Salicylate..... 1.25 " "	2.50 " "	100
Angelica Oil..... 14.00 " "	None available	
Benzaldehyde..... .50 " "	4.50 per Lb.	800
Bergamot Oil..... 5.50 " "	6.00 " "	10
Caraway Seed Oil..... 20.00 " "	7.00 " "	460
Cardamom Oil..... .95 " "	2.00 " "	110
Clove Oil..... 5.00 " "	13.50 " "	170
Coriander Oil..... 3.10 " "	18.00 " "	500
Cumarin..... 1.75 " "	3.50 " "	100
Eugenol..... 4.25 " "	5.00 " "	16%
Geranium, African..... 1.30 " "	5.25 " "	316
Heliotropin..... 9.00 " "	50.00 " "	456
Iacinth..... .85 " "	14.00 " "	1544
Juniper Berry Oil..... 3.25 " "	4.50 " "	39
Lavender Oil..... .75 " "	1.25 " "	67
Lilacine..... 5.50 " "	12.00 " "	118
Linalyl Acetate..... 1.40 " "	16.00 " "	1042
Musk Crystals..... 28.00 " "	60.00 " "	114
Neroli, Bigarade..... 30.00 " "	70.00 " "	133
Neroli, Petale..... 4.50 " "	10.00 " "	122
Palmarosa Oil..... 3.00 " "	3.75 " "	25
Patchouly Oil..... 3.50 " "	22.00/25.00 per Lb.	649
Otto of Rose..... 6.00 " Oz.	20.00 " Oz. (Unobtainable)	233
Rose Synthetic..... 40.00 " Lb.	50.00 per Lb.	25
Sandalwood Oil E. I..... 4.75 " "	11.50 " "	142
Sandalwood W. I. (Amyris)..... 1.25 " "	6.00 " (Unobtainable)	400
Terpineol..... .25 " "	40 per Lb.	60
Thymol..... 2.00 " "	17.00 " "	750
Vanillin..... .35 " "	.67 " "	100
Vetivert, Bourbon..... 9.00 " "	11.00/12.00 per Lb.	33
Benzyl Benzoate..... .80 " "	10.00 per Lb.	1150
Phenylethyl Alcohol..... 10.00 " "	54.00 " "	440
Phenyl Acetic Aldehyde..... 20.00 " "	60.00 " "	400
Musk Keton..... 8.00 " "	60.00 " "	650

SCHEDULE "C"—PLAIN OR ORDINARY OUTSIDE BOXES OR PACKERS.

Size.	June, 1914.	June, 1917.
7 3/4-6 1/4-1 1/2 with Part.....	\$15.00 per M.	\$25.00 per M.
8 3/4-6-5.....	18.50 " "	32.00 " "
10 1/4-9 1/4-4.....	20.00 " "	35.00 " "

The increase on above boxes is about 75%.

FANCY BOXES—TOILET WATERS AND EXTRACTS.

Extract Boxes.	June, 1914.	June, 1917.
1/2-Oz. Size.....	\$20.00 per M.	\$30.00 per M.
1 " ".....	22.50 " "	35.00 " "
2 " ".....	25.00 " "	40.00 " "
Toilet Water Boxes.		
2-Oz. Size.....	\$30.00 per M.	\$45.00 per M.
4 " ".....	50.00 " "	75.00 " "
8 " ".....	60.00 " "	90.00 " "

The increase on Fancy Boxes is about 50%.

SUPPLEMENTARY STATEMENT.

	June, 1914.	June, 1917.	Percentage Increase.
Carbonate Magnesium Powd....	\$0.06 Lb.	\$0.13 1/2 Lb.	125%
Italian Talc.....	33.50 Ton	\$7.50 Ton	74%
Rice Starch Powd.....	.08 Lb.	.24 Lb.	200%
Corn ".....	.03 Lb.	.06 Lb.	100%
Glycerine.....	.22 Lb.	.62 Lb.	180%
Oxide Zinc.....	.07 1/4 Lb.	.16 1/4 Lb.	124%
Tin Talc Cans.....	17.00 per M.	34.00 per M.	100%
Aluminum Screw Caps, 4-Oz.....	.70 Gross	1.23 Gross	77%
Alcohol, 95%.....	2.60 Gallon	3.87 Gallon	49%

(With contemplated increase of \$1.10 per proof gallon the price will be, after passage of War Revenue Bill, \$5.83 per gallon, or 125% increase; not taking into consideration any further increase in price which may occur previous to passage of Revenue Bill.)

AMERICANS INCREASE PURCHASES OF ABYSSINIAN CIVET.

(Continued from page 141.)

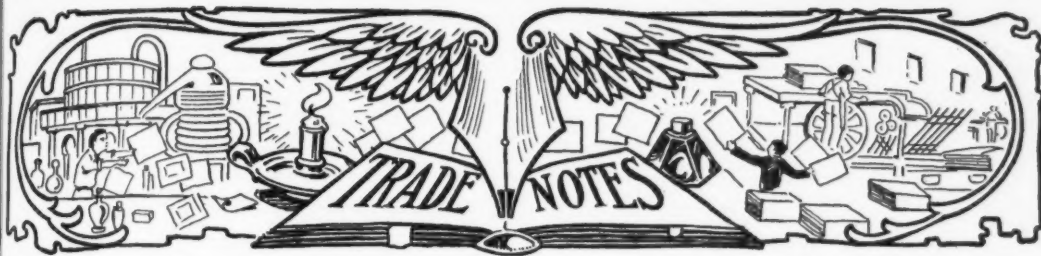
well where the heat is felt to any extent. The animal is larger than the ordinary domestic cat, is generally vicious in disposition, and has been known when enraged to injure people seriously.

The natives of the districts mentioned make a business of hunting civet cats, which they take to trade centers for bartering. These hunters are not nearly so well advanced in civilization as the average Abyssinian. The merchants obtain the cats by trading to the hunters the things from the outside world that they need. Cattle are often used in trading. A good cat will bring a cow in exchange.

The market price per ounce of the pure article at present is about \$1.35, according to the Abyssinians who sell it, but some has been invoiced here as low as \$0.88 per ounce. This discrepancy probably is due to adulteration, which takes place in Aden. The Abyssinian cat owner will not, as a rule, adulterate his civet because of a belief that his cats would die as a result. It is unlikely that all Aden civet dealers adulterate their product, but many of them undoubtedly do, and in a very skillful manner.

Civet as taken from the cat is a semiliquid substance of yellowish color. The color is said to become darker with age. Although its principal use is as a basis for perfumery, the odor of the civet itself is decidedly disagreeable and strong.

Years ago, before skill in adulteration was acquired, a favorite method of increasing the weight of the civet was said to be by adding a quantity of banana pulp which had somewhat the appearance of the civet, and the odor of which was concealed by, and blended with the more powerful one of the civet. This method has been succeeded by one which consists in adding to a given quantity of civet an equal quantity of a mixture of gum arabic, soap, and ghee (clarified butter). This method is said to be quite satisfactory, and if well done to make detection of the adulteration difficult. Well informed natives in Aden say that there are people who make a business of preparing this mixture for adulterating civet, and selling it to dealers who may wish to use it.



Mr. and Mrs. Gilbert Colgate, of 306 West 76th street, New York City, announce the engagement of their daughter, Miss Florence Hall Colgate, to Major Edwin St. John Greble, Jr., of the Second Field Artillery of Pennsylvania. Miss Colgate made her debut in society in 1912 and the Major was graduated from West Point in the class of 1909. The prospective bride's father is vice president of Colgate & Co., and has served in important offices in the Manufacturing Perfumers' Association.

Mr. R. R. Goerstner, chemist for Crusellas y Cia., Havana, Cuba, is now in this country to establish a branch manufacturing laboratory for the production of toilet preparations.

Conscription of perfume factories to manufacture munitions was urged by Professor Harold G. Moulton of the University of Chicago at a joint conference of the Western Economic Society and the City Club last month in Chicago.

Madero Bros., New York, have purchased for their employees 250 Liberty bonds which are to be paid for on weekly installments. A 10 per cent. bonus will be granted by Madero Bros. to their employees when the latter have completed payments.

Perfumeries valued at \$216,053 cleared from the Port of New York during May for various foreign destinations.



HARRY BARTOLD, JR.

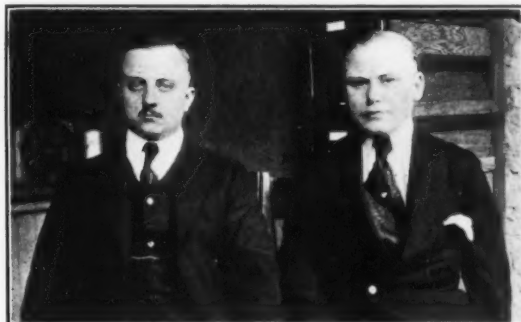
RICHARD BARTOLD

"The apple does not fall very far from the tree" is an old saying, and true indeed in this instance, the young men under this tree being the apple of their father's eye, and well may he be proud of them. Mr. Bartold, senior, is Chicago manager for George Lueders & Co., New York, and president of the Perfumery, Soap & Extract Makers' Association of Chicago.

The barber supply business of Robt. A. Holcke, Brooklyn, N. Y., who died on March 15, is being wound up by Mr. H. J. F. Holcke, administrator. Mr. Holcke was one of the best known barber supply dealers in the East, and had been in business for many years.

Mr. F. K. Woodworth contributed an interesting article to the June number of the *American Exporter* on the progress of the perfume industry since the days of the Pharaohs. In conclusion he says:

"The United States leads the way in perfumery manufacture, and the many world-wide known trade marked names of the products of large perfume manufacturers furnish ample evidence of the industry, progressiveness and success of America in a field of endeavor as popular as flowers will ever be cherished."



C. A. SENDER

A. C. DRURY

Mr. Arthur C. Drury, whose likeness appears here, established the firm that bears his name in June, 1916, and last January he was joined by Chas. A. Senger. These two young men have had a number of years' experience in the supply and manufacturing pharmaceutical lines, and are active in selling to Mid West manufacturers who use chemicals, perfumery raw materials, etc.

Col. William Cooper Procter, of the Procter & Gamble Co., was chairman of the Cincinnati committee having charge of the recent Red Cross campaign to raise war relief funds. The teams were spurred on by his offer of an extra 10 per cent. to the leading team's fund, with the understanding that he did not want to give less than \$25,000 in this way.

Mr. and Mrs. Williard A. Walsh, of Chicago, are in the East to spend part of the heated term on the Connecticut shore. Mr. Walsh is secretary and treasurer of the Compagnie Morana.

La Revue de Grasse reports that it has noted another proof of American sympathy and generosity in the magnificent gift of 2,500 francs made by George Lueders & Co., the American agents of Lautier Fils, of Grasse. This firm sent its contribution for the relief of widows and orphans of the war.

The *Revue* refers again to the ambulance subscription undertaken by Mr. W. G. Ungerer, of New York, and to the welcome arrival of the two ambulances.

Peet Bros. soap-making plant at Oakland, Cal., has a force working day and night shifts to supply the trade with its products.

Mr. Roberdeau A. McCormick, of McCormick & Co., Baltimore, has been appointed a member of the Municipal Factory Site Commission, the object of which is to attract new industries to Baltimore.

Mr. A. E. A. Bettesworth, secretary and treasurer of W. J. Bush & Co. (Canada), Ltd., Montreal, dropped in recently at our new sanctum with F. C. Breeze, who travels from Toronto for the company. They report their business in the Dominion in good shape.

The Lackie Co., Louisville, Ky., which is engaged in the manufacture of cosmetics, etc., has increased its capital stock from \$10,000 to \$20,000.

Mr. G. H. Suddard of M. L. Barrett & Co., Chicago, Ill., is a very hard worker, but his friends will be glad to know that he has an artistic hobby that will prevent him from growing old. A short time ago he presented to the Art Institute of Chicago several artistic Chinese clay figures, one of the Han period (200 B. C.) and the other of the Tang period (200 A. B.). These gifts were recently described in the bulletin of the Institute.

Mr. E. W. Laning, chemist for the Sanitol Chemical Laboratory Co., St. Louis, was business visitor to New York early this month.

Messrs. H. C. Fox & Sons, Inc., Philadelphia, Pa., have notified their customers that on July 31, 1917, the corporation will discontinue operations. This glass plant has been conducted by the Fox family for 64 years at this same location. Two months ago several buildings were destroyed by fire.

Mr. August Wanek, of Elbert & Co., this city, is spending his vacation at Soo-Nipi Park, New Hampshire.

Mr. Frank J. McDonough, recently elected a director in the New York wholesale drug house of McKesson & Robbins, Inc., is another example of the possibilities young men have in achieving business success through perseverance, devotion to duty and general adaptability. Mr. McDonough was born in 1889 and went to work for the firm in 1901. After serving faithfully in minor posts in the requisition and import departments he was promoted to the place made vacant in the buying department by the death of Mr. J. C. Wagstaff. As assistant to Mr. John McKesson, Jr., he soon assumed the making of all foreign

purchases, going to Europe for the purpose of getting a complete grasp on conditions. His duties have gradually been increased and lately he has had charge of the firm's insurance and of the purchase of all chemicals and drugs.

American Pharmaceutical Association will meet in Indianapolis in the week of August 27.

Automatic Powdered Soap Dispenser Co., Inc., Manhattan Borough, New York City, has increased its capital stock from \$5,000 to \$7,000.

One of the most interesting books recently published for private circulation is a compilation of a series of addresses delivered between August 1, 1914, and April 1, 1917, by Mr. I. Frank Stone on aniline color, dyestuff and chemical conditions. Mr. Stone, who is second vice-president and treasurer of the new big dyestuff consolidation, is eminently qualified to handle this subject in a masterful manner. Aside from his extremely important sources of information and his advantageous view point he possesses a rare talent for clear and lucid exposition. The final paper of the series is a convincing argument on the "Permanence of the American Dyestuff Industry."

The du Pont Powder Co. at Wilmington, Del., has made formal announcement that it will include the manufacture of synthetic dyestuffs and kindred products. It has been for some time an open secret that the company was investigating the dye situation. Its chemists were at work on the problem even before the war, and when the foreign supply was cut off, these efforts were redoubled, with what is now said to be complete success, from a laboratory standpoint. There remained only the discovery of the solution from a commercial standpoint, and this is now declared to have been found.

The du Ponts were already largely interested in the manufacture of the intermediates, benzol, toluol, naphthalene, and possessed the physical equipment to continue the tests that are now said to have resulted in the successful production of dyestuffs.

The will of John Hoge, the wealthy retired soap maker whose death at Zanesville, Ohio, was reported in our last issue, disposed of an estate of \$4,000,000. Bequests of \$600,000 to the Actors' Fund of America and \$1,100,000 to the New York Metropolitan Museum of Art have been set aside by the Probate Court on the ground that he was of unsound mind when he made these bequests. Thirty-one churches in Zanesville will receive \$1,000 each, and two hospitals there will get \$20,000 each. Mrs. Frederick Grant, a niece, who made her home with Mr. Hoge, gets real estate valued at \$600,000. Asa Hoge, nephew, of Leavenworth, Kan., receives \$50,000, and the balance of the estate, valued at \$3,000,000, goes to James Doster Hoge, nephew, of Seattle, Wash. Mr. Hoge organized and for many years was at the head of the Star Soap Co., which is now controlled by Procter & Gamble of Cincinnati. Later he was active in realty in New York and elsewhere.

Judge Thompson, in the United States Court, Philadelphia, has entered a final decree for a perpetual injunction in the suit of Potter Drug and Chemical Corporation vs. Pennsylvania Soap Co.

Mr. Chas. V. Sparhawk, 278 Pearl street, New York, importer and dealer in essential oils and synthetics, has just returned from a six weeks' trip through the middle west, and reports very good business.

Mr. William A. Hover, of W. A. Hover & Co., Denver, has been elected president of the United States National Bank of Denver. Mr. Hoover in 1902-1903 was president of the National Wholesale Druggists' Association.

Mr. O. L. Biebing, secretary of the Mallinckrodt Chemical Works of St. Louis, was a New York City visitor in the early part of this month.

Numerous friends of Mr. and Mrs. L. J. Zollinger, of Chicago, have been sending condolences to them anent the untimely death of their little son on June 30. The boy was only ten months old and exceptionally bright and vigorous. On the day of his death he seemingly was in good health and spirits. Mr. Zollinger is with the Hydrox Co.

The gentleman on the left has been one of the best known supply men in the Middle West on perfumery and

Mr. Adolph C. Wolmark, head of the Wolmark Chemical Co., of this city, is sending out neat cards containing these true, trite and timely observations:

"Some part of the press has recently instigated a false alarm in regard to economy. What it really meant was to eliminate waste.

"When waste is prevented, economy is automatically established.

"In most cases extravagance is the result of unnecessary waste.

"This nation has broken all records in the accumulation of billions.

"Labor is scarce, the individual earning capacity high, and production at its maximum.

"With the above advantages, there is no room for doubt as to the Nation's prosperity. Let every thinking person do his or her share in propagating the truth. Not economy, but prevention of waste."

A certificate has been filed at Albany announcing that the capital stock of Elson & Brewer, Manhattan Borough, New York City, has been increased from \$20,000 to \$100,000.

The first glance at the accompanying engraving might



EDGAR A. WEBER



C. J. DEEGAN



M. B. ZIMMER

B. F. ZIMMER

soap circles, and he is now president of the Deegan Supply Co., at 35 W. Kinzie street, Chicago, dealing in laboratory supplies and manufacturing special apparatus.

Mr. Deegan has been in the laboratory supply line for twenty years and is thoroughly familiar with the needs of all chemists in charge of soap and other industrial laboratories. Three glass blowers are constantly employed in making special apparatus.

Mr. A. L. van Ameringen, manager of the synthetic perfume department of Polak & Schwarz, Zaandam, Holland, will shortly call on perfumers and soapmakers in the East and Middle West.

Messrs. E. J. Schmidt & Co., 59 Fulton street, New York (Successors to Leerburger Bros.), have been appointed American agents for Schmaller & Bompard, Grasse, France, whose products have been well and favorably known in this country for many years.

Mr. E. J. Schmidt was with Leerburger Bros. for 20 years, and is in charge of the firm's manufacturing. Mr. S. L. Schider, who has been in the line many years, is in charge of the sales work, and M. A. Pichel, a gentleman of extensive business interests, is also a partner.

lead one to suppose that the two gentlemen were in irons, but their attitude is simply one of patient waiting while our representative took the snap shot during the recent convention of the Flavoring Extract Manufacturers' Association in Chicago.

These young men are among the most popular of the perfumery soap and extract industry in Chicago, where they represent Fritzsche Brothers, of New York.

On June 27 they entertained several friends attending the convention by giving an impromptu dinner at the Illinois Athletic Club. Those present were: Dr. R. S. Swinton, T. L. Keough, L. J. Zollinger, H. Bartold, H. Bartold, Jr., Richard Bartold, E. S. Buckley, G. M. Day, E. A. Bergwall, J. E. Wolfe, F. A. Ross, R. E. Heekin, G. H. Lynas, A. G. Spilker and the Editor.

The Chemists' Club of New York has taken a lease of a five-story building at 46 and 48 East 41st street. It will be extensively altered and connected with the club building on several floors. The lease, which aggregates about \$100,000, contains an option to purchase which probably will be exercised by the club in the near future.

Mr. Chester A. Smeltzer, whose photo adorns this space, is sales manager for H. Marquardt & Co., and within a

few weeks will reach the fifteenth anniversary of his employment by the firm. While devoting his attention largely to vanilla beans, in which he is regarded as very well informed indeed, he supervises the sales of the other imports of the company. As to his personal qualities, the welcome reception he received at the extract convention in Chicago indicates that he is *persona grata* wherever he is known and his circle of friends is wide.



C. A. SMELTZER

Mr. G. Brenke, head of the Chicago laboratory of the Jewel Tea Co., was in New York a week this month inspecting the company's new branch laboratory in Hoboken, N. J.

The board of directors of the Procter & Gamble Co., Cincinnati, has appropriated a special fund to be set aside for war expenses during the period of the war. The fund amounts to \$1,000 a day for every business day. The company has declared the regular quarterly 5 per cent. dividend on the common stock, payable August 15 and an extra dividend of 4 per cent. in new common stock payable on the same date. The quarterly dividend on the preferred was payable July 14.

Through the courtesy of Mr. W. A. Scott who is traveling representative for Ungerer & Co. through the middle West, we have secured the accompanying snapshot taken on the farm of Paul Themanson, Omaha, Neb. Mr. Themanson in his professional hours is chemist for the Goodrich Drug Co. of Omaha. In his spare time he is raising potatoes to reduce the high cost of living.



On the left is Farmerette Themanson, and the gentleman with the basket is Mr. J. R. Grottendick, brother-in-law of Mr. Themanson, chemist for the Wilely Chemical Co., Indianapolis, Ind.

This photo was taken while these three rustics were discussing the coming crop, and they seem well pleased with the prospects.

Mr. F. E. Watermeyer, of Fritzsche Brothers, New York, surprised his friends by entering the ranks of the *benedictines* on June 16. The bride was Mrs. Margaret Ward, and the ceremony took place at the home of Mr. Watermeyer's sister in San Francisco.

Mr. Emmet M. Kaylor has enlisted in the Aviation Corps and is now undergoing preliminary training at Princeton, N. J. Experience in actual flying will be secured at the Aviation grounds at Mineola, L. I.



E. M. KAYLOR

Mr. Kaylor has been salesman in the Eastern district for the Metal Package Co., Brooklyn, N. Y., during the past five years and is well liked among the buyers. He is a graduate of Erskine College, S. C., and served in the National Guard of his native State, Tennessee, several years. We join with all Mr. Kaylor's friends in wishing him safe service wherever the fortunes of war may take him.

NEW INCORPORATIONS.

Scott's Toilet Preparations, Inc., Lockport, N. Y., to manufacture toilet preparations, articles, etc.; \$30,000 capital stock; has been incorporated by J. V. Graff, 304 Lafayette avenue, Buffalo; A. L. Craine, C. A. Craine, 110 East avenue, Lockport.

C. H. Hall & Co., 508 Watchung avenue, Plainfield, N. J., to deal in drugs, chemicals, toilet articles, ice cream, etc.; has been incorporated with \$25,000 capital stock.

H. Fuchs, Inc., Manhattan Borough, New York City, flavoring extracts; \$7,000 capital stock; has been incorporated by O. and H. and E. E. Fuchs, 54 West 40th street.

O. W. Young, Inc., 35 Ross street, Newark, N. J., to deal in oils, greases, gasolines, etc.; has been incorporated with \$25,000 capital stock.

International Alcohol Corporation, to manufacture alcohol from sawdust, wood waste, celluloid and other substances; \$4,000,000 capital stock; has been incorporated in Delaware by Lewis F. Rebore, Frank Cusick, A. Sheard, all of New York.

Freedman, Stein Co., Chelsea, Mass., to manufacture ethereal fruit flowers, essences, extracts, etc.; \$2,000 capital stock; has been chartered by Benj. Freedman, president; Henrich Stein, 36 Crescent street, Boston, treasurer, and S. Freedman.

Re-Be Soap Co., Inc., Manhattan Borough, New York City, dispensing devices for soap, tooth and toilet powders; \$25,000 capital stock; has been incorporated by J. W. Beckmann, J. W. and L. M. Rembe, Jersey City.

F. W. Hall & Co., Inc., Manhattan Borough, New York City, to manufacture laundry supplies, colors, and chemicals, \$100,000 capital stock, has been incorporated by J. B. Baer, L. C. Karutz, E. M. Taub, 60 Wall street.

NEW PUBLICATIONS, PRICE LISTS, ETC.

GEORGE LUEDERS & Co., 211 Pearl street, New York, send us the June wholesale price list of L. Givaudan & Co., Geneva, Switzerland, manufacturers of synthetics and fine chemicals for perfumery, for which Lueders & Co. are sole agents in the United States and Canada. Also the Lueders wholesale June price list of essential oils, etc., supplied by Lautier Fils, Grasse, France. The Lautier section comprises wholesale quotations for concrete flower essences, new semi-liquid essences, peach kernel oil, sweet almond oil, olive oil floral waters, musk, compounded flavors, natural fruit essences, vegetable colors, certified colors; vanilla beans, soap and perfumery colors, the whole being concluded with a full and comprehensive market report on essential oils and essences.

BURT'S BOX BULLETIN, Buffalo, N. Y., is essentially a patriotic number, the pages being sprinkled with the Stars and Stripes in colors. The editors are entitled to great credit for their patriotism and perspicuity.

O. A. BROWN Co., Inc., 101 Beekman street, New York.—We have at hand this firm's July price list of essential oils, synthetic and aromatic chemicals, perfumers' materials, etc., of which they are importers, exporters and manufacturers. The price list, which is in brown, paper and ink, as becomes a thoroughly enterprising firm, contains a list of the Official Essential Oils as enumerated in the Ninth Revision of the United States Pharmacopoeia. Among the materials treated of in the price list are natural true fruit essences and imitation fruit flavors, both ethereal and non-ethereal.

NULOMOLINE Co., New York, W. J. Bush & Co., Inc., selling agents, sends us a very handy little volume, entitled "Biscuit Bakers' Handbook," which deals with the practical use of nulomoline in the products of bakers and confectioners. Working formulas are given for the users.

REXALL AD-VANTAGES, published by the United Drug Co., Boston, Mass., contains a very instructive page on "Ways to Sell Perfumes" in the retail trade in its July number. Soldiers' Gift Week also gets a boost. Such departments in drug journals are helpful to the entire perfume and toilet goods industries.

ARABOL MFG. Co., 100 William street, New York, in its July announcement advises progressive labelers to take to heart the lesson set by President Wilson in relation to the principle of "holding to strict accountability," the application of which to its tinnol and other adhesives it declares to be the real test.

"White's Sundae Formulary," by E. F. White, published by the Spatula Co., Sudbury Bldg., Boston, Mass., is a vest pocket edition of 1,500 soda fountain formulas. It contains 200 pages and is mailed for 50 cents.

WOLMARK CHEMICAL Co., 17 East 14th street, New York, sends us new and revised price list of synthetic and flower oils. The list covers concrete flower oils, essential oils, together with oils adapted for use in toilet waters, hair tonics, shampoos, massage creams and cosmetics generally. The company offers to furnish formulas and other information to its patrons.

BIBLIOGRAPHICAL CONTRIBUTIONS, Vol. III, No. 2, July, 1917, Lloyd Library, Cincinnati, Ohio.—This quarterly issue relates to the bibliography of botany, exclusive of floras, giving data on authors whose names begin with P and Q. It is prepared by the indefatigable librarian, Edith Wycoff.

CHARLES ROSS & SON Co., 148-156 Classon avenue, Brooklyn, N. Y.—We have at hand catalogue No. 20 of

dry mixing and grinding machinery and circular No. 6-B relating to the Ross improved liquid and semi-paste mixers. The machinery exploited in these catalogues is adapted for use in various operations in the toilet goods and cosmetics industries. The circulars are illustrated and contain full details regarding the merits claimed for the numerous mechanical devices offered to the trade.

SCHUTZ-O'NEILL Co., Minneapolis, Minn., send us price list and other information about their light running gyrator sifter, which is recommended by them for use by drug millers, spice grinders and in chemical sifting operations.

IN MEMORIAM FOR DEPARTED FRIENDS.

BAUR, JACOB, Liquid Carbonic Co., Chicago, July, 1912.

BEDFORD, ANDREW P., soaps, July, 1909.

BURDICK, NORMAN, Burdick & Son, tin boxes, Albany, N. Y., July, 1908.

BUSH, ALEXANDER, of W. J. Bush & Co., Inc., New York, July, 1908.

CALISHER, NATHAN, of Oakley & Co., perfumers, New York, brother of A. B. Calisher, July, 1916.

CHAPMAN, GEORGE W., president Chapman & Rodgers, Inc., perfumers, Philadelphia, Pa., July, 1914.

DURGIN, HORACE WEBSTER, president Granite Soap Co., Newburgh, N. Y., July, 1916.

GATTEFOSSÉ, ABEL, commercial director of Gattefossé & Fils, Lyons, France, in action, July, 1916.

HOGUE, JAMES T., retired soap manufacturer, Baltimore, Md., July, 1915.

KOKEN, CHARLES E., barbers' supply merchant, St. Louis, Mo., July, 1915.

LEBERMAN, ADOLPH, of L. M. Leberman & Sons, soap manufacturers, Philadelphia, July, 1910.

LEONE, G., Les Hesperides, Calabria, Italy, July, 1908.

METZ, E. C., Palmetto Soap Co., Charleston, N. C., July, 1908.

MIANNAY, EUGENE, perfumer, July, 1908.

OEHLE, JOHN, McKesson & Robbins, New York, July, 1916.

POWELL, WILLIS J., soaps, St. Louis, Mo., 1912.

PRICE, DR. VINCENT C., founder Price Flavoring Extract Co., Chicago, July, 1914.

TREMARI, P., vanilla beans, Papantla, Mex., July, 1912.

OBITUARY NOTES.

Dr. A. J. Guidry, chemist for La Valliere Co., New Orleans, died on June 29, aged 44. He was secretary of the local section of the American Chemical Society.

Joseph S. Richmond, with Van Dyk & Co., New York, for eleven years as a salesman, died July 12, aged sixty years. He had been ill a year. Mr. Richmond, who left a widow, son and daughter, lived at 309 West 139th street. The burial took place July 13.

Augustus J. Bell, retired soap manufacturer, died in Toledo, Ohio, last month, aged 62 years.

John Andlauer, formerly a soap manufacturer, died in Kansas City, Kas., June 22, aged 63 years.

1,231,834. POWDER-APPLYING BRUSH. Paul Amadeo, Shenandoah, Pa. Filed Sept. 6, 1916. Serial No. 118,754. (Cl. 15-50.)

A brush having a hollow handle providing a reservoir, a head on said handle having a passage extending there-through, bristles on the head, and a resiliency mounted wire having a free end portion extending into said passage in the direction of the length of the passage, substantially as described.

1,232,187. DISINFECTANT. Heinrich Bechhold, Frankfurt-on-the-Main, Germany, assignor to Chemische Fabrik Ladenburg G. M. B. H., Ladenburg, Germany. Filed Dec. 28, 1909. Serial No. 535,253. (Cl. 167-63.)

As a new article of manufacture, a disinfecting solution containing a chlorinated or brominated betanaphthol having not less than three and not more than four halogen atoms per molecule, said material being dissolved in an alcoholic solution of a potash soap, said disinfecting solution producing when diluted with water a milky solution, substantially as described.

TRADE-MARK REGISTRATIONS GRANTED.

117,099.—Cleaning and Polishing Preparations for Painted, Varnished and Wooden Surfaces.—Frank H. Bosson, Boston, Mass. Filed November 10, 1916. Serial No. 99,206. Published April 10, 1917.

117,103.—Certain Named Chemicals and Pharmaceutical Preparations.—Jean Wallace Butler, Chicago, Ill. Filed December 26, 1916. Serial No. 100,156. Published April 17, 1917.

117,109.—Scouring Powder.—Celluloid Starch Co., New York, N. Y., and New Haven, Conn. Filed October 3, 1916. Serial No. 98,382. Published February 13, 1917.

117,123.—Certain Named Pharmaceutical Preparations.—Eugenol Co., Minneapolis, Minn. Filed November 11, 1916. Serial No. 99,239. Published April 17, 1917.

117,158.—Shaving-Cream, Shaving-Powder and Shaving-Stick.—William J. Kelley, Chicago, Ill., assignor to The N. K. Fairbank Co., Chicago, Ill., a corporation of New Jersey. Filed March 4, 1916. Serial No. 93,305. Published April 17, 1917.

117,196.—Soap.—Peet Bros. Mfg. Co., Kansas City, Kan. Filed March 29, 1915. Serial No. 85,520. Published June 6, 1916.

117,208.—Antiseptic Solution.—Scott & Bowne, Bloomfield, N. J. Filed September 9, 1916. Serial No. 97,882. Published April 17, 1917.

117,256.—Scouring-Soap.—The Holbrook Mfg. Co., Jersey City, N. J. Filed December 10, 1915. Serial No. 91,372. Published April 24, 1917.

117,277.—Certain Named Chemicals and Pharmaceutical Preparations.—The Mihalovitch Brothers Co., Cincinnati, O. Filed Dec. 26, 1916. Serial No. 100,175. Published March 27, 1917.

117,283.—Certain Named Oils and Greases.—The Atlantic Refining Co., Philadelphia, Pa. Filed January 9, 1917. Serial No. 100,465. Published May 1, 1917.

117,284.—Hair-Grower.—Nannie L. Beane, Parkin, Ark. Filed March 19, 1917. Serial No. 102,240. Published May 1, 1917.

117,288.—Certain Chemical and Pharmaceutical Preparations for Toilet Purposes.—George Borgfeldt & Co., New York, N. Y. Filed March 20, 1917. Serial No. 102,279. Published May 1, 1917.

117,289.—Toilet Powder.—A Bourjois & Co., Inc., New York, N. Y. Filed January 17, 1917. Serial No. 100,661. Published May 1, 1917.

117,290.—Castor-Oil.—Gail G. Bowman, Cleveland, Ohio. Filed November 25, 1916. Serial No. 99,531. Published April 24, 1917.

117,297.—Antiseptics and Disinfectants.—Bernadette Chaloult Clement, London, England. Filed March 3, 1917. Serial No. 101,851. Published May 1, 1917.

117,306.—Preparation for Foot-Powder and Chilblains.—Foot Friend Co., Ontario, Ore. Filed March 9, 1917. Serial No. 102,004. Published May 1, 1917.

117,311.—Soap, Soap-Powder and Washing-Powder.—The Globe Soap Co., Cincinnati, Ohio. Filed February 2, 1917. Serial No. 101,124. Published May 1, 1917.

117,316.—Certain Pharmaceutical Preparations for Toilet Purposes.—Lucy Duff Gordon, New York, N. Y. Filed March 19, 1917. Serial No. 102,250. Published May 1, 1917.

117,319.—Antiseptic Compounds.—Anthony M. Hance, Philadelphia, Pa. Filed March 6, 1917. Serial No. 101,924. Published May 1, 1917.

117,320.—Washing-Powder.—Haskin Products Co., Goshen, Ind. Filed March 19, 1917. Serial No. 102,255. Published May 1, 1917.

117,326.—Soap (solid and liquid).—Richard Hudnut, New York, N. Y. Filed March 1, 1917. Serial No. 101,818. Published May 1, 1917.

117,328.—Toilet Soaps.—International Drug Co., Wilmington, Del. Filed March 24, 1917. Serial No. 102,416. Published May 1, 1917.

117,332.—Soap.—Interstate Cotton Oil Refining Co., Sherman, Tex. Filed March 3, 1917. Serial No. 101,860. Published May 1, 1917.

117,339.—Soap.—Lautz Bros. & Co., Buffalo, N. Y. Filed March 7, 1917. Serial No. 101,962. Published May 1, 1917.

117,341.—Toilet Preparation, Namely, Tooth-Wash, an Antiseptic Compound.—David J. Little, Binghamton, N. Y. Filed February 16, 1917. Serial No. 101,428. Published April 24, 1917.

117,345.—Soap.—Joseph V. Meyer, St. Louis, Mo. Filed November 1, 1916. Serial No. 99,027. Published May 1, 1917.

117,346.—Compound to Be Dissolved in Water with Soap to Clean Fabrics.—James W. Mitchell, Russellville, Ala. Filed February 16, 1917. Serial No. 97,084. Published May 1, 1917.

117,348.—Face-Powder, Rouge and Powder Compacts, Creams, Toilet Water and Perfume.—Philip Munter Co., Inc., New York, N. Y. Filed February 5, 1917. Serial No. 101,175. Published April 24, 1917.

117,349.—Certain Named Chemicals, Medicines and Pharmaceutical Preparations.—Mutual Sales Co., Kansas City, Mo. Filed February 17, 1917. Serial No. 101,498. Published May 1, 1917.

117,350.—Preparation for the Treatment of the Scalp.—John Neclas, New Haven, Conn. Filed March 10, 1917. Serial No. 102,044. Published May 1, 1917.

117,352.—Deodorizer and Disinfectant.—Samuel Neuman, Chicago, Ill. Filed February 27, 1917. Serial No. 101,750. Published May 1, 1917.

117,353.—Certain Named Chemical and Pharmaceutical Preparations.—Northam Warren Corp., New York, N. Y. Filed March 6, 1917. Serial No. 101,946. Published May 1, 1917.

117,369.—Antiseptic Solution.—Scott & Bowne, Bloomfield, N. J. Filed September 9, 1916. Serial No. 97,881. Published April 24, 1917.

117,374.—Dandruff-Remover and Hair-Dresser.—S. O. S. Manufacturing Co., Inc., Lake Charles, La. Filed February 26, 1917. Serial No. 101,711. Published May 1, 1917.

117,384.—Certain Named Chemical and Pharmaceutical Preparations.—Van Vleet-Mansfield Drug Co., Memphis, Tenn. Filed January 23, 1917. Serial No. 100,866. Published May 1, 1917.

117,397.—Shampoo-Powder, Shampoo-Liquid and Pile-Ointment.—Henry E. Zutz, St. Paul, Minn. Filed January 22, 1917. Serial No. 100,839. Published May 1, 1917.

117,488.—Tea, Coffee, Cocoa, Chocolate, Spices, Extracts for Flavoring Foods, and Olive-Oil.—The Temple Garden Co., Boston, Mass. Filed July 31, 1916. Serial No. 97,007. Published May 1, 1917.

TRADE-MARK REGISTRATION APPLIED FOR.

87,581.—Abraham & Straus, Brooklyn, N. Y. (Filed June 25, 1915. Used since 1900.)—Extract of vanilla.

97,713.—Merck & Co., New York, N. Y. (Filed Aug. 30, 1916. Used since Aug. 3, 1916.)—Oils (fatty, ethereal, expressed, essential and distilled).

100,405.—The Sidney Ross Co., New York, N. Y.—(Filed Jan. 6, 1917. Used since Sept. 1, 1916.)—Medicated soap.

(Continued on page 152.)

FOREIGN CORRESPONDENCE AND MARKET REPORT

ARGENTINA.

TAX ON ALCOHOL IN PERFUMERY.—By a law of February 28, 1917, promulgated March 3, the internal revenue tax on alcohol for use in the manufacture of perfumes was increased from 0.50 peso to 1 peso paper per liter (from \$0.81 to \$1.62 per United States gallon). This tax applies also to the alcohol contained in perfumery of foreign production.

BRITISH CHINA.

ESSENTIAL OILS.—Consul General George E. Anderson, Hongkong, reports: Throughout 1916 there was a steady and increasing demand in the United States for cassia oil, which was above the normal and had a marked effect upon the trade in essential oils in Hongkong during the year. While exports of essential oils to all countries out of Hongkong decreased from 13,071 cases in 1915 to 12,429 cases in 1916, according to the returns of the Hongkong General Chamber of Commerce, shipments of cassia oil to the United States increased in value from \$48,792 to \$113,732. Shipments of aniseed oil, however, decreased from \$177,157 in 1915 to \$108,271 in 1916. Exports of cassia oil to the United States during the first three months of the current year have fallen off somewhat, amounting to only 41,330 pounds, valued at \$27,762, compared with 89,999 pounds, valued at \$51,364, in January-March, 1916; but on the other hand American purchases of aniseed oil through Hongkong during the quarter have amounted to 138,387 pounds, valued at \$84,212, compared with 74,998 pounds, valued at \$46,700, in the like period a year ago.

FRANCE.

PERFUMERY.—The Minister of Commerce, in reply to the requests of a deputation of Nice Members of Parliament, recently decided, in harmony with the Ministry of Finance, to allow Nice firms to import roses, intended for the manufacture of perfumery, for a period of one month. A recent decree having forbidden the importation of all fresh cut flowers, the Italian rose growers of Liguria, not wishing to lose their crops, signed with French perfumers in the Alpes Maritimes contracts for the dispatch of the rose petals used by perfumers for making rose essence by distillation, and large consignments followed.

PORTUGAL.

OLIVE OIL.—The *Diario do Governo* (Lisbon) publishes a statement, issued by the Statistical Department of the Portuguese Ministry of Finance, that the olive oil production of Portugal in 1916-17 amounted to 16,150,149 liters, and stocks of oil on March 30 amounted to 18,279,976 liters.

URUGUAY.

OLIVE OIL.—Owing to the steady increase in the price of cotton and other oils, a strong demand has arisen in Uruguay for second grade olive oil. Superfine olive oil, formerly supplied by France and Italy, is now coming in steadily increasing proportions from Spain.

THE MARKET.

Essential Oils, Aromatic Chemicals, etc.

A sensational jump amounting to 50 cents per pound in domestic oil of peppermint has furnished the principal topic for discussion in the market for essential oils, aromatic chemicals and other perfumery materials. This followed closely on the heels of unfavorable crop reports, cold winds, worms and drought, having resulted in a delay of fully one month in distilling operations, so that distillation will not be under way this year until the first week in August. The advance in peppermint prompted a sympathetic uplift in the price of spearmint amounting to 50 cents.

The manufacturing and importing trade point to an unabated brisk demand throughout the period. Higher costs of crude material, maintenance of stringent exchange relations, not only with the Orient, but with India, Ceylon and Australia, together with the fact that ocean transportation and war risk rates have continued to tend higher owing to the commandeering of additional steamer room, have all combined to bring out a still higher market. African rose geranium and Bourbon geraniums are 25 cents higher on the month. Citronella, while in steady seasonable demand, remains about unchanged, with offers at 56@60 cents.

Embargo action by the British Government as regards future shipments of cloves from Zanzibar resulted in a violent advance in the spice to 35 cents, the highest figure in forty-five years. An advance of 20 to 40 cents took place in Zanzibar and Bourbon oil of cloves in sympathy, the minimum asking prices being \$2.10@2.50 per pound. Consequent upon the advance in clove oil there was an advance of 25 cents in eugenol, the synthetic base for vanillin. The latter product sold early in the month at 62 cents, but is now held at 65@70 cents.

Otto of rose was advanced to the extent of \$4 an ounce in some prominent circles following reports that the French rose crop will only probably be one-half of the average output owing to shortages of fuel, labor, etc. The new French crop began arriving on the market early in July, but only small and unimportant quantities of the finest Turkish and Bulgarian varieties appeared on the market. The situation in lavender oil has likewise been more stringent, the French having advanced 35 cents and the genuine English close to \$3. The new crop of French lavender is not due until September.

Caraway oil is 75 cents to \$1 higher, and soap makers, who are the principal consumers, are alarmed, as the cost of the seed is ten times what it was under normal conditions, and prospects for an improvement in the situation are remote. Transactions in oil of petit grain, which is about the only suitable substitute for bergamot, have been heavy. Wormseed oil became exceedingly scarce, practically all sellers raising their asking price to \$5.00 minimum.

With the transportation problem unrelieved the situation in all of the Sicilian oils has ruled strong. Stocks of lemon oil abroad are reported adequate, but the market here has remained firm. Primary market conditions on bergamot and orange oils have been steady to unchanged, so that price changes here have only been fractional. Advances were scored during the interval in neroli, carvol, cassia, croton, erigeron, Kananga, mace, pine needles, West Indian sandalwood and tansy.

The enormous increase in prices for spirits has dumfounded the perfumery manufacturing trade. Sugar cane cologne spirits alcohol is fully 80 cents per gallon higher than a month ago, and the advance bids fair to continue, owing to the fact that an additional tax of

(Continued on page 152.)

(Quot

Almon

"

"

"

Amber,

"

Anise

"

Aspic

Bay, P

Bergam

Birch

Bois d

Cade

Cajepu

Calamu

Camph

Caraw

Cardar

Carvol

Cassia

"

Cedar

"

Celery

Cinnam

Citron

Cloves

"

Copaib

Corian

Croton

Cubeb

Eriger

Eucaly

Fenne

Geran

"

Ginge

Ginge

Guaia

Heml

Junip

Kana

"

Lave

"

Lemo

Lemo

Lime

"

Linal

Mace

Must

"

Nero

"

Nutm

Opop

Oran

PRICES IN THE NEW YORK MARKET

(Quotations on this page are those made by local dealers, but are subject to revision without notice because of the unstable conditions created by the European War)

(See last page of Soap Section for Prices on Soap Materials.)

ESSENTIAL OILS.

Almond Bitter.... per lb..	\$12.50-13.50	Orange, sweet, Italian....	3.00-3.25	Cumarin, natural	nom.
" F. F. P. A.	15.00-15.50	" sweet, W't Indian	2.50-2.70	" artificial, domestic	19.00-20.00
" Artificial	5.00- 5.50	Origanum .....	.22-.50	" " foreign..	19.00-20.00
" Sweet True.....	.95- 1.00	Orris Root, concrete, foreign	5.25-6.00	Diphenylmethane	nom.
" Peach-Kernel ...	.35- .38	Orris Root, concrete, domestic	3.75-4.00	Diphenyloxide	nom.
Amber, Crude	1.00-1.50	Orris Root, absolute.. (oz.)	40.00-45.00	Ethyl Cinnamate	nom.
" Rectified	1.65-2.00	Parsley	8.00	Eucalyptol	1.45-1.60
Anise	1.05-1.10	Patchouly, foreign	25.00-28.00	Eugenol	3.25-3.75
" Lead free	1.15-1.25	" domestic	nominal	Geraniol, domestic.....	4.50-5.00
Aspic (Spike) .....	.80-1.40	Pennyroyal, American ..	1.65-1.75	" foreign	6.00-6.50
Bay, Porto Rico	2.30-2.50	" French	1.25-1.50	" from palma rosa.	5.50-6.00
Bergamot, 35-36%....	6.00-6.25	Peppermint	2.85-3.00	Geranyl Acetate	7.75-8.00
Birch (Sweet)	2.25-2.50	" redistilled	3.05-3.30	Heliotropine, domestic....	5.00-6.00
Bois de Rose, Femelle...	.375	Petit Grain, South American	3.75-4.00	" foreign	nom.
Cade .....	.90-1.00	" French	6.50-8.00	Indol, C. P. (oz.)	nom.
Cajeput .....	.85-.90	Pimento	3.00-3.25	Iso-Butyl-Salicylate	nom.
Calamus .....	.375	Pine Needles	2.00	Iso-Eugenol	3.75-4.25
Camphor, Japanese, "white"	.16-.20	Rose	22.00-25.00	Linalol, from bois de rose	6.00-7.00
Caraway Seed	7.75- 8.00	" synthetic	2.50-2.75	Linalyl Acetate	10.00-12.00
Cardamom	26.00-27.00	Rosemary, French.....	.85-1.00	" Benzoate	nom.
Carvol	15.00	" Spanish .....	.60-.65	Methyl Anthranilate....	30.00
Cassia, 75-80% Technical	1.25- 1.30	Rue	4.00-4.50	" Cinnamate	7.25
" Lead free	1.35	Sage	4.25	" Heptenone	nom.
" Redistilled	1.85	Safron	40-.50	" Heptene Carbonate.	nom.
Cedar Leaf .....	.80-90	Sandalwood, East India...	12.00-12.50	" Paracresol	16.00
" Wood .....	.15-.20	" West India	6.50-7.50	" Salicylate .....	.75-.90
Celery .....	.22.00	Sassafras, artificial.....	.28-.30	Mirbane, rect. drums....	.22
Cinnamon, Ceylon .....	.56-.60	" natural .....	.85-.95	Musk Ambrette	nom.
Citronella, Ceylon .....	.85-.90	Savin	6.50	" Ketone	nom.
" Java	2.10- 2.25	Snake Root	15.00-16.00	" Xylene	14.00
Cloves, Zanzibar	2.25- 2.50	Spearment	2.50	Nonylic Alcohol.....	nom.
" Bourbon	1.00-1.10	Spruce .....	.90-.95	Phenylacetaldehyde	70.00
Copaiba	14.00-15.00	Tansy	2.50	Phenylethyl Alcohol	52.00
Coriander	1.00-1.10	Thyme, French, red.....	1.35-1.40	Phenylacetic Acid.....	nom.
Croton .....	.55	" " white	1.50-1.65	Rhodinol, domestic	14.00-16.00
Cubeb	1.75-1.85	" Spanish, red.....	1.35-1.40	" foreign	18.00
Erigeron .....	.70-.75	Verbena	6.00	Skatol, C. P. (oz.)	nom.
Eucalyptus, Australian, 70%	4.00-4.50	Vetivert, Bourbon	12.00-15.00	Terpineol, domestic.....	.40-.60
Fennel, Sweet	5.25- 5.35	" Indian	30.00-55.00	" foreign	1.25
Geranium, African	5.00- 5.15	Wintergreen, (genuine gaultheria)	4.00-4.50	Terpinyl Acetate	2.75-3.00
" Bourbon	3.50-3.75	Wormseed	5.00	Thymol	17.25-17.50
" Turkish (palma rosa)	8.00-8.25	Wormwood	3.25-3.50	Vanillin .....	.65-.70
Ginger	2.00	Ylang-Ylang, Bourbon....	12.00-15.00	Violet, Artificial,	7.50-12.00
Gingergrass	6.00	" " Manila	28.00-40.00		
Guaiac (Wood)					

AROMATIC CHEMICALS.

Acetophenone	nominal.
Amyl Salicylate, domestic.	2.75-3.00
" foreign..	7.00-8.00
Anethol	2.50-2.75
Anisic Aldehyde	6.50
Benzaldehyde, domestic....	4.50-5.00
" F. F. C., domestic.....	5.00-5.50
Benzyl Acetate, domestic..	6.00-7.00
" foreign..	nom.
" Alcohol	nom.
" Benzoate	10.00-11.00
Borneol	4.00
Bornylacetate	4.50
Bromstyrol	nominal
Cinnamic Acid	nom.
" Alcohol	nom.
" Aldehyde	3.50
Citral	3.00-3.25
" C. P.	3.50-3.75
Citronellol, domestic.....	14.00-20.00
" foreign	20.00-24.00

BEANS.

Tonka Beans, Angostura..	.90-1.00
" " Para .....	.65-.70
Vanilla Beans, Mexican....	5.00-6.50
" " Cut	3.75-4.25
" " Bourbon	2.25-3.25
" " Tahiti	1.50-1.60

SUNDRIES.

Ambergris, black.... (oz.)	12.00-15.00
" gray	25.00-28.00
Chalk precipitated .....	.04½-.10
Civet, horns	2.75
Cologne Spirit	4.10-4.12
Lanolin .....	.50-.75
Menthol	3.00-3.10
Musk, Cab, pods..... (oz.)	8.00-10.00
" " grains	15.00-20.00
" Tonquin, pods. "	20.00-20.50
" " grains	29.50-30.00
Orris Root, Florentine, whole	.16-.18
" " powd. and gran.	.19-.22
Rice starch .....	.24½
Talc, Italian	35.00
" French	15.00-22.00
" Domestic	10.00-13.00

THE MARKET.

(Continued from page 150.)

\$2.20 is contemplated, if not already added, to alcohol. The movement towards reducing the production of spirits in America, France and Great Britain is being watched in all manufacturing circles with the utmost interest. In the meanwhile supplies of methyl, anthranilate and phenylacetaldehyde are practically cleared and prices are nominally higher.

Vanilla Beans.

The chocolate trade have been active buyers of Mexican vanilla beans during the interval, and the market has taken on additional strength, especially on choice quality goods. Private advices from Vera Cruz report a still stronger market on all varieties, the rise in the price of silver bullion to the highest point since 1892 having exerted a strengthening influence by reason of a sympathetic advance in exchange rates.

Latest dispatches from producing districts in Mexico indicate that this season's crop of whole beans will not exceed 90,000 pounds, while the crop of cuts will only amount to approximately 25,000 pounds. The further paring down of crop estimates in conjunction with the import statistics for the first ten months of the fiscal year ending with April, which shows that total receipts up to that time had only amounted to 605,595 pounds, against 766,755 pounds in the same time last year and 707,034 pounds in 1915, bears eloquent testimony of the strong position of the market. Importers are also facing additional handicaps through the commandeering of vessels in the New York-Mexico service, and first arrivals, which are now scheduled, will no doubt be overdue.

Some pressure to sell Bourbon beans developed, and holders shaded their prices to the extent of 25 cents per pound, both on the cuts and the whole, both varieties being offered within the range of \$2.00@2.25 per pound, respectively. The South American grades have remained firm at \$3.50@3.75, although the actual range has been nearer \$3.25@4.25. Nothing special developed on Tahiti beans, the spot price being unchanged at \$1.50@1.60.

TRADE MARK REGISTRATION APPLIED FOR.

(Continued from page 149.)

- 100,551.—International Soap & Mfg. Co., Scranton, Pa. (Filed Jan. 12, 1917. Used since Oct. 30, 1916.)—Soft soap.
- 100,777.—Philadelphia Quartz Co., Philadelphia, Pa. (Filed Jan. 20, 1917. Used since Jan. 1, 1915.)—Sodium silicate.
- 102,024.—C. L. Cotton Perfume & Extract Co., Earlville, N. Y. (Filed March 10, 1917. Used since the year 1890.)—Talcum powder, tooth paste, tooth powder, face powder, rouge nail polish, face lotion, hair and scalp tonics, eyebrow pencils, face cream, massage creams, deodorizing creams, freckle creams, cold creams, peroxid creams and preparations for the hair, scalp and skin.
- 102,256.—Charles A. Hawkins, Indianapolis, Ind. (Filed March 19, 1917. Used since Dec. 1, 1914.)—Vanishing creams, cold creams, massage creams, rouge, face powder, dandruff remedy, scalp tonic, lemon cream lotion and skin tonic.
- 102,282.—Cloutier & Jarvis, Claremont, N. H. (Filed March 20, 1917. Used since Feb. 3, 1917.)—A hair wash.
- 102,692.—Christiane R. London, Chicago, Ill. (Filed April 3, 1917. Used since Sept., 1916.)—Hair tonics.
- 102,808.—Estate Henry C. Miner, Inc., New York. (Filed April 7, 1917. Used since Feb. 23, 1917.)—Face powders.
- 102,908.—James S. Kirk & Co., Chicago, Ill. (Filed April 12, 1917. Under ten-year proviso. Used since May, 1883.)—Soap.
- 103,008.—Cocotone Chemical Co., Los Angeles, Cal. (Filed April 16, 1917. Used since Nov., 1914.)—A hair tonic, dandruff remover and scalp cleanser.

- 103,172.—P. Stephen Harris, Kansas City, Mo. (Filed April 21, 1917. Used since April 1, 1917.)—A hair remedy compound.
- 103,264.—G. B. Martin, Frankfort, Ind. (Filed April 24, 1917. Used since Oct. 1, 1913.)—Tooth powder, tooth cream.
- 103,308.—John T. Stanley Co., Inc., New York, N. Y. (Filed April 25, 1917. Used since Jan., 1910.)—Talcum powder, perfumery and cold cream.
- 103,396.—John J. Wittwer, Sr., Seattle, Wash. (Filed April 28, 1917. Used since March 23, 1917.)—Shampoo preparation.
- 103,425.—William A. McLeod, Joliet, Ill., and South Bend, Ind. (Filed April 30, 1917. Used since June 1, 1916.)—Cold cream, complexion powder, rouge, toilet water, perfume and shampoo.
- 103,786.—Italian Products Distribution Co., Chicago, Ill. (Filed May 14, 1917. Used since Sept. 11, 1914.)—Olive oil.
- 103,787.—Italian Products Distribution Co., Chicago, Ill. (Filed May 14, 1917. Used since April 15, 1917.)—Olive oil.
- 103,791.—Samuel M. Newmark, Los Angeles, Cal. (Filed May 14, 1917. Under ten-year proviso. Used since Jan. 1, 1894.)—Lemon extract.

PURE FOOD AND DRUG NOTES.

(Continued from page 139.)

exists for marking articles with such other terms and the articles are marked in accordance with the custom.

(f) The quantity of solids shall be stated in terms of weight and of liquids in terms of measure, except that in case of an article in respect to which there exists a definite trade custom otherwise, the statement may be in terms of weight or measure in accordance with such custom. The quantity of viscous or semisolid foods, or of mixtures of solids and liquids, may be stated either by weight or measure, but the statement shall be definite and shall indicate whether the quantity is expressed in terms of weight or measure, as, for example, "weight 12 oz.," or "12 oz. avoirdupois," "volume 12 ounces," or "12 fluid ounces."

(g) The quantity of the contents shall be stated in terms of weight or measure unless the package be marked by numerical count and such numerical count gives accurate information as to the quantity of the food in the package.

(h) The quantity of the contents may be stated in terms of minimum weight, minimum measure, or minimum count, for example, "minimum weight 10 oz.," "minimum volume 1 gallon," or "not less than 4 oz.;" but in such case the statement must approximate the actual quantity and there shall be no tolerance below the stated minimum.

(i) The following tolerances and variations from the quantity of the contents marked on the package shall be allowed:

(1) Discrepancies due exclusively to errors in weighing, measuring, or counting which occur in packing conducted in compliance with good commercial practice.

(2) Discrepancies due exclusively to differences in the capacity of bottles and similar containers resulting solely from unavoidable difficulties in manufacturing such bottles or containers so as to be of uniform capacity: *Provided*, That no greater tolerance shall be allowed in case of bottles or similar containers which, because of their design, can not be made of approximate uniform capacity than is allowed in case of bottles or similar containers which can be manufactured so as to be of approximate uniform capacity.

(3) Discrepancies in weight or measure, due exclusively to differences in atmospheric conditions in various places, and which unavoidably result from the ordinary and customary exposure of the packages to evaporation or to the absorption of water.

Discrepancies under classes (1) and (2) of this paragraph shall be as often above as below the marked quantity. The reasonableness of discrepancies under class (3) of this paragraph will be determined on the facts in each case.

(f) A package containing two avoirdupois ounces of food or less is "small" and shall be exempt from marking in terms of weight.

(k) A package containing one fluid ounce of food or less is "small" and shall be exempt from marking in terms of measure.

(l) When a package is not required by paragraph (k) to be marked in terms of either weight or measure, and the units of food therein are six or less, it shall, for the purpose of this regulation, be deemed "small" and shall be exempt from marking in terms of numerical count.

New Cheap Preservative Discovered.

The Department of Agriculture is reported to have discovered a new food preservative which will greatly assist in the food conservation campaign. The new preserving fluid consists of water and cornmeal, mixed in the ratio of two to one, and allowed to stand until it ferments, which takes about two or three days. The fermented mixture produces a solution in which lactic acid predominates. The department has already successfully preserved potatoes, beets and several varieties of beans in the new preservative.



SUCCESS OF THE SOAP SECTION

With this issue the Soap Industry Section enters upon the second year of its existence. In our initial appearance we stated that through the cooperation of our subscribers we expected to succeed in making this section useful to those interested in the manufacture of soap. In spite of unforeseen circumstances which have increased the difficulties of editing a journal of this sort, we have been able through the suggestions of our subscribers and the cooperation of several prominent men in the industry to attain a goal we set out to reach. The experimental stage has been passed and we trust to improve with age.

The Editor wishes to sincerely thank all those who have cooperated with him in contributing original articles in writing the market reports, in making suggestions as to methods whereby this section could be improved and for expressions of appreciation of the section itself. As was stated when this section first appeared it is only through the support of those whom we reach that we can hope to arrive at a standard for a journal such as the soap making industry of this country should have.

Through the aid of many in the last year we have been able to carry through this project and we not only solicit the help and suggestions of those who have contributed to our success thus far, but trust the coming year may bring to our assistance more of those who are interested with us in the soap making industry.

FAT FAMINE IS NOW FEARED.

A soap famine is said to be an inevitable certainty for this country as one result of the growing shortage of fats and oils, for which there is no immediate relief in sight. This is the opinion of an expert who has been watching conditions closely for the last three or four years.

This nation uses more soap per capita than any other people on earth, and in fear of a soap famine important committees under the Council of National Defense and under the food administration organization of Herbert C. Hoover are bending their efforts to institute relief measures. This threatened shortage of soap and consequent

record prices is but one phase of the dearth of fats and oils.

Whereas glycerine has previously been a by-product in the manufacture of soap, on account of the war demand for glycerine to be used in the manufacture of high explosives, soap is now a by-product of glycerine. Under these conditions, although all materials used in the manufacture of soaps are unusually high, the soapmakers have been able to keep the selling price at normal because of the high prices they have been receiving for the by-product glycerine for conversion into nitroglycerine to fill war orders and for technical purposes.

While the soap manufacturers have been producing more soap lye than could possibly be used in this country, it was naturally assumed that a tremendous surplus was being piled up which would hold soap prices at normal for an indefinite period. It develops, however, that this surplus production has been sold abroad at prices ruinously low in comparison with prevailing prices, in order to keep stock moving so that the extraordinary profits from glycerine might be harvested.

As a result of all this, coupled with an increasing shortage of fats, both animal and vegetable, there is a lack of the raw material for soap manufacture.

Prospect of a 10 per cent duty on tallow and the war tax on toilet soap, the tax on freight and other war measures are adding a still heavier load on this particular schedule. The condition is not being generally realized, but it is being felt generally by the trade that with tallow now more than 20 cents and threatening to go to 30 cents, while soap lye glycerine is selling only at 42 cents per pound, the profit on the latter cannot carry as it has been carrying the increasing cost of the former. The price of tallow has more than doubled and this has taken all the profits out of soap manufacture and will force greatly increased prices.

Government officials and trade representatives who have been called into conferences are agreed that there is pressing need to further increase the production of oil-bearing plants, both those which are already recognized as a source of supply, and others.

Now here is what it is proposed shall be done to meet the situation: It is agreed that there should be a dependable census, comparable to the food census, of the situation on fats and oils. That the government has already gone a considerable distance is shown by the fact that the Bureau of the Census has issued a statement regarding a survey of the manufacture of vegetable oils for edible purposes, to be found elsewhere in this issue. A similar report covering animal fats and oils will soon be forthcoming.

Following the taking of this fats and oils census it is

proposed to develop the oil-seed crops. It is too late to do anything in this line this year, but those working along development of such auxiliary crops for the Department of Agriculture say such development can be done successfully and that these crops will greatly relieve the shortage.

There is a suggestion for relief of the situation. That is the possibility of widely extending the use of oils and fats as articles of popular diet in the form of margerines.

That the United States now badly needs fats and oils, will need them much more within the next two years, and that there is in this country not only a great opportunity but the utmost incentive to build up a great vegetable oil industry, taking in many seed crops not now grown, is the consensus of opinion of those who have been studying conditions and devising war measures for relief.

GERMANY TO LEGISLATE ON POTASH.

New potash legislation is expected in Germany, according to reliable advices through official sources which were received in Washington recently by chemists closely associated with the plans of this government for development of the industry in the United States.

These reports from Berlin stated that the twenty-fourth parliamentary committee dealt with the new draft of the bill for the regulation of prices in the potash industries. This bill aims at the extension for one year of the price schedule for domestic sales. This schedule has been raised twice since the beginning of the war.

Representatives of the potash industry demanded an increase in the maximum, prices, claiming that both coal and explosives had increased in cost, and that the laborers now received special war wages. All of the speakers referred to the depressed condition of the potash market, contending that owing to the number of plants which could find no suitable market for their products, fully 62 out of the total number of 207 plants were not operating.

A Socialist member presented a resolution which demanded a governmental monopoly of the potash industries of the empire, under the supervision of parliament, but it was voted down.

POTASH EXTRACTION FROM KELP.

The experimental plant for the recovery of potash from the giant kelp of the California coast, which is now being constructed at Summerland, near Santa Barbara, is nearing completion, and it is expected will be ready to begin operations by August 1. The work is being done under the direction of J. W. Turentine of the Bureau of Soils, United States Department of Agriculture, and was made possible by an appropriation of \$175,000 for the purpose made by Congress last year. In a recent statement concerning the work of the bureau along these lines Mr. Turentine says:

"The situation created by the European war made it possible for all known sources of potash to be developed. Many of these, of course, will have to be abandoned immediately on the restoration of competition with German potash. In general it may be said that only those sources which make possible the production of valuable by-products will be able to compete. Among these is kelp, and it is with the idea of developing by-products that our present endeavors are being made."

The capacity of the plant will be about 200 tons raw kelp

per day. It is proposed to improve, if possible, present methods of rendering kelp and at the same time to develop others which will admit of complete by-product recovery. All data finally will be obtained on the factory scale, so that it will be immediately available for the use of the American public.

DEPOSITS OF GLASS ROSIN TYPES.

Announcement is made by the Federal Bureau of Chemistry that three additional complete sets of glass rosin types have been prepared and deposited as follows: A set at the Food and Drug Laboratory, Department of Agriculture, Appraiser's Stores, San Francisco, Cal.; a set with the Chamber of Commerce, Mobile, and a set at the Food and Drug Laboratory, Transportation Building, Chicago.

All sets are accompanied by the necessary grading box and instructions concerning methods of use, and may be used by any interested party in checking disputed gradings or in checking types made of rosin for grading purposes.

A set of these types is retained at the Bureau of Chemistry, Washington, as a loan set, and will be lent on request to any responsible producer, dealer or consumer in grading rosin concerning which there is a dispute as to grade and for the purposes of checking rosin types.

This makes a total of eight complete sets of glass rosin types for the use and information of the naval stores industry. The other four sets are distributed as follows: Naval Stores Committee, New York Produce Exchange; Naval Stores Committee of the Savannah Board of Trade, and the Naval Stores Committee of the New Orleans Board of Trade. These sets are also available for the use of all interested parties, subject to the rules and regulations of the local depository.

MAKING GLYCERINE FROM SUGAR.

Discovery in the internal revenue division laboratory of a process for manufacturing glycerine from sugar has been announced by the Treasury Department. Under the secret process evolved the cost of this substance, a heavy factor in the manufacture of explosives, will be reduced to slightly more than one-fourth of its present cost.

Glycerine is at present manufactured almost entirely from fats at a cost of 90 cents a pound, which is six times its cost of production before the war. Extraction of the product from sugar will insure production, officials estimate, at 25 cents a pound or less.

The immense importance of the discovery in conserving the fat supply of the nation is pointed out by officials, who declare that Germany's fat shortage is largely due to the use of fats for production of explosives. Germany, they say, has long since been forced to discontinue the manufacture of soap in order to conserve the fats for munitions making. The discovery is the first to be announced by chemists working in co-operation with the Council of National Defense.

France Appeals to America for Soap.

An appeal for soap and soap-making materials has been sent by the mayor of Lyons, France, to Washington, through Consul Jones. The appeal says that many laundries have been forced to close, and those still open charge fabulous prices. Many persons are forced to have their clothes dry-cleaned despite the high price of gasoline.

Report

22

Allo-
acids fro
fatty acid
Transfer
as can be
wide-mo
taining t
paper the
funnel, e
cool in a
cool and
weight, a
the perc
soluble
(As the
tions giv
the meth

23

(a) S
hydroxi
Protect
Allow to
(b) P
of the p
Cool in
protect
(c) 95
droxid.
(d) D
est acid
(e) B
ize an a
(f) 10
100 cc.
(g) P
plunge i

24

Weight
into a sa
3 meth
(1) U
95% alc
be made
the tens
the sodi
into the
flask on
the flask
(2) U
cc. of th
ing the
well-an
directed
esters a
(3) J
*From
Chemists

METHODS FOR ANALYSIS OF FATS AND OILS

Report of the Committee on Editing Methods of Analysis Presented to the Association of Official Agricultural Chemists.*

(Continued from Page 93, June, 1917.)

22 INSOLUBLE ACIDS (HEHNER NUMBER).—OFFICIAL.

Allow the flask, containing the cake of insoluble fatty acids from 21 and the paper through which the soluble fatty acids have been filtered, to drain and dry for 12 hours. Transfer the cake, together with as much of the fatty acids as can be removed from the filter paper, to a weighed, wide-mouthed beaker flask. Then place the funnel, containing the filter, in the neck of the flask and wash the paper thoroughly with hot absolute alcohol. Remove the funnel, evaporate off the alcohol, dry for 2 hours at 100°C., cool in a desiccator and weigh. Again dry for 2 hours, cool and weigh. If there is any considerable decrease in weight, re-heat for 2 hours and weigh again. Calculate the percentage of insoluble fatty acids.

SOLUBLE VOLATILE ACIDS (REICHERT-MEISSEL NUMBER).

(As these determinations are entirely empirical, the directions given must be followed exactly. In reporting results the method used should always be stated.)

Reichert-Meissl Method.—Official.

23 REAGENTS.

(a) *Sodium hydroxid solution (1 to 1).*—The sodium hydroxid should be as free as possible from carbonates. Protect the solution from contact with carbon dioxide. Allow to settle and use only the clear liquid.

(b) *Potassium hydroxid solution.*—Dissolve 100 grams of the purest potassium hydroxid in 58 cc. of hot water. Cool in a stoppered vessel, decant the clear solution and protect from contact with carbon dioxide.

(c) *95% alcohol by volume.*—Distilled over sodium hydroxid.

(d) *Dilute sulphuric acid.*—Dilute 200 cc. of the strongest acid to 1 liter with water.

(e) *Barium (or sodium) hydroxid solution.*—Standardize an approximately N/10 solution.

(f) *Indicator.*—Dissolve 1 gram of phenolphthalein in 100 cc. of 95% alcohol.

(g) *Pumice stone.*—Heat small pieces to a white heat, plunge in water, and keep under water until used.

24 SAPONIFICATION.

Weigh 5.75 cc., about 5 grams, of the filtered sample, into a saponification flask and proceed by 1 of the following 3 methods.

(1) *Under pressure with alcohol.*—Place 10 cc. of the 95% alcohol in the flask containing the fat (the flask must be made of strong, well-annealed glass, capable of resisting the tension of alcoholic vapor at 100°C.) and add 2 cc. of the sodium hydroxid solution. Insert a soft, cork stopper into the neck of the flask, tie down and place the stoppered flask on a water or steam bath for at least an hour, rotating the flask gently from time to time. Cool before opening.

(2) *Under pressure without the use of alcohol.*—Place 2 cc. of the potassium hydroxid solution in the flask containing the fat (the flask being round-bottomed and made of well-annealed glass to resist pressure), cork and heat as directed under (1). This method avoids the formation of esters and the removal of the alcohol after saponification.

(3) *With a reflux condenser and the use of alcohol.*—

Place 10 cc. of the 95% alcohol in the flask containing the fat, add 2 cc. of the sodium hydroxid solution and heat on a steam bath until the saponification is complete, using a reflux condenser.

After the saponification, if alcohol was used, remove it by evaporation on a steam bath.

25 DISTILLATION AND TITRATION.

Dissolve the soap, obtained as directed under 24, by adding 135 cc. of recently boiled water (132 cc. if potassium hydroxid was used in the saponification) and warm on the water bath, with occasional shaking, until the solution is clear. Cool to 60°-70°C., add 5 cc. of the dilute sulphuric acid (8 cc. if potassium hydroxid was used in the saponification), stopper loosely and heat on the water bath until the fatty acids form a clear, transparent layer. Cool to room temperature, add a few pieces of the pumice stone and connect with a glass condenser by means of a bulb tube. Heat slowly with a free flame until ebullition begins and distil, regulating the flame so as to collect 110 cc. of distillate, in as nearly 30 minutes as possible. Mix this distillate, filter through a dry filter, and titrate 100 cc. with the standard barium or sodium hydroxid solution, using phenolphthalein as an indicator. The red color should remain unchanged for 2-3 minutes.

Multiply the number of cc. of N/10 alkali used by 1.1, divide by the weight of fat taken and multiply by 5 to obtain the Reichert-Meissl number. Correct the result by the figure obtained in a blank determination.

Leffman and Beam Method.—Official.

26 REAGENTS.

Glycerol-soda solution.—Add 20 cc. of the sodium hydroxid solution, prepared as directed under 23 (a), to 180 cc. of pure, concentrated glycerol.

The other reagents used are described under 23.

27 DETERMINATION.

Add 20 cc. of the glycerol-soda solution to about 5 grams of the fat in a flask, weighed as directed under 24, and heat over a free flame, or on an asbestos plate, until complete saponification takes place, as shown by the mixture becoming perfectly clear. If foaming occurs, shake the flask gently.

Add 135 cc. of recently boiled water, drop by drop at first, to prevent foaming, and 5 cc. of the dilute sulphuric acid, distil without previous melting of the fatty acids, using an apparatus similar to that illustrated in 28, Fig. 13, regulating the flame so as to collect 110 cc. of distillate in as nearly 30 minutes as possible. Filter, titrate the volatile acids and calculate the Reichert-Meissl number, as directed under 25. Conduct a blank determination and correct the result accordingly.

Insoluble Volatile Acids (Polenske Number).

28 Polenske Method.—Tentative.

Proceed as directed under 27 up to the point at which 110 cc. of distillate have been collected, except that only 20 minutes are allowed for the distillation, employing an apparatus of the exact dimensions illustrated in Fig. 13. Substitute a 25 cc. cylinder for the receiving flask to collect any drops that may fall after the flame has been removed. Immerse the flask containing the distillate almost com-

*From the Journal of the Association of Official Agricultural Chemists.

pletely in water at 15°C. for 15 minutes, filter the 110 cc. of distillate and determine the approximate Reichert-Meissl number, if desired, as in 27, avoiding too violent shaking of the distillate and consequent emulsification of the insoluble acids previous to filtration. Remove the remainder of the soluble acids from the insoluble acids upon the filter paper by washing with 3 successive portions of 15 cc. of water, previously passed through the condenser, the 25 cc. cylinder and the 110 cc. receiving flask. Then dissolve the insoluble acids by passing 3 successive 15 cc. portions of neutral 90% alcohol by volume through the filter, each portion previously passed through the condenser, the 25 cc. cylinder and the 110 cc. receiving flask. Titrate the combined alcoholic washings with N/10 sodium hydroxid, using phenolphthalein as an indicator.

Run a blank in the same manner and subtract the quantity of the standard alkali required to neutralize the 45 cc. of alcohol, used in washing the apparatus and filter paper of the blank, from that required in each Polenske determination. Report the Polenske number as the number of cc. of N/10 alkali required to neutralize the insoluble volatile acids from the 110 cc. of distillate as obtained above. Since the entire distillate is filtered it is not necessary to multiply the burette reading by 1.1, as in 25, but a calculation must be made, as directed in 25, to reduce the actual number of cc. found in the titration to the number which would have been required had exactly 5 grams of fat been used.

Liquid and Solid Fatty Acids.

29 *Muter Method, Modified by Lane*.—Tentative.

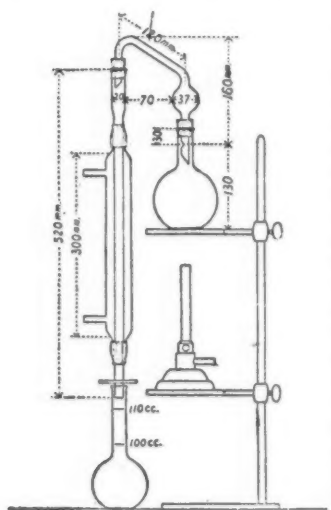


FIG. 13. APPARATUS FOR DETERMINATION OF POLENSE NUMBER.

Weigh 5 grams of the oil or fat into an Erlenmeyer flask, saponify, precipitate with lead acetate solution and treat the precipitated lead soap with ether, as directed under 37. Filter the ether solution of the soluble lead soap into a Muter tube or separatory funnel and decompose the soap by shaking with 40 cc. of hydrochloric acid (1 to 5). The soap is completely decomposed when the ether becomes clear and colorless.

Draw off the lead chlorid from the ether solution and

wash the ether free from acid. Evaporate, until free from ether, an aliquot of this solution in an atmosphere of carbon dioxide, in order to prevent the oxidation of the oleic acid, and weigh to determine the per cent of liquid acids; determine the iodine number as directed in 16 or 18, using 0.2-0.3 gram of this residue.

As it is very difficult to dry the unsaturated acids without very serious oxidation, it is just as satisfactory to determine the weight of insoluble acids by the following method:

Wash the insoluble soap left on the filter into a flask, decompose with hydrochloric acid and heat until the fatty acids are melted. Fill the flask with hot water, cool, pour off the water and again wash the solidified fatty acids. Dissolve in hot 95% alcohol by volume, transfer to a weighed dish, remove the alcohol by evaporation, dry, weigh and calculate the per cent of solid fatty acids.

30

Free Fatty Acids.—Official.

Weigh 20 grams of fat, or oil, into a flask, add 50 cc. of 95% alcohol by volume which has been neutralized with dilute sodium hydroxid solution, using phenolphthalein as an indicator, and heat to boiling. Shake the flask thoroughly in order to dissolve the free fatty acids as completely as possible. Titrate with N/10 alkali, shaking thoroughly until the pink color persists after vigorous shaking.

Express the results either as percentage of oleic acid, as acid degree (cc. of N/1 alkali required to neutralize the free acids in 100 grams of oil or fat), or as acid value (mg. of potassium hydroxid required to saturate the free acids in 1 gram of fat or oil).

One cc. of N/10 alkali is equivalent to 0.0282 gram of oleic acid.

Acetyl Value.

31 *Benedikt-Lewkowitsch Method*.—Tentative.

Boil the oil or fat with an equal volume of acetic anhydride for 2 hours, pour the mixture into a large beaker containing 500 cc. of water and boil for 30 minutes. To prevent bumping, pass a slow current of carbon dioxide into the liquid through a finely drawn out tube reaching nearly to the bottom. Allow the mixture to separate into 2 layers, siphon off the water, and boil the oily layer with fresh water until it is no longer acid to litmus paper. Separate the acetylated fat from the water and dry and filter in a drying oven.

Weigh 2-4 grams of the acetylated fats into a flask and saponify with alcoholic potash as in 20. If the distillation process is to be adopted, it is not necessary to work with a standardized alcoholic potassium hydroxid solution, but in the filtration method, which is much shorter, the alcoholic potassium hydroxid solution must be measured exactly. In either case evaporate the alcohol after saponification and dissolve the soap in water. Then either distil or filter as follows:

(1) *Distillation*.—Acidify with sulphuric acid (1 to 10) and distil as in 25. As several hundred cc. must be distilled, either run a current of steam through or add portions of water from time to time (500-700 cc. of distillate will be sufficient). Filter the distillates to remove any insoluble acids carried over by the steam and titrate with N/10 potassium hydroxid, using phenolphthalein as an indicator. Multiply the number of cc. of alkali employed by 5.61 and divide by the weight of substance used to obtain the acetyl value.

(2) *Filtration*.—Add to the soap solution a quantity of standard sulphuric acid exactly corresponding to the amount of alcoholic potassium hydroxid solution added, warm gently, filter off the free fatty acids which collect on top, wash with boiling water until the washings are no longer acid and titrate the filtrate with N/10 potassium hydroxid, using phenolphthalein as an indicator. Calculate the acetyl value as directed under (1).

(To be continued)

ON THE DETERGENT ACTION OF SOAP

A detergent has three functions: (1) the wetting of a greasy surface, (2) the emulsification of grease, (3) the stabilizing of the very fine suspension of dirt and emulsion of grease which results from this emulsification. The first and second of these functions depend upon the production of a low-tension surface layer at the interface between the solution and the grease while the third depends upon the colloidal nature of the detergent solution. Shorter pointed out that a soap solution may form this low-tension surface layer of soap in two ways: (1) by adsorption of the undecomposed soap, (2) by the interaction of the free fatty acid in the oil or grease and the alkali set free in the solution by hydrolysis of the soap.

The present paper describes experimental work with the object of determining the relative importance of these two forms of action. The work is based on the principle that against a perfectly neutral oil a soap solution can form a soap layer in only the first of the above ways, while against an oil containing a little free fatty acid the soap layer may be produced in the two ways, and the solution of the problem lies in measuring the surface tension of a soap solution first against a neutral oil and then against the same oil, to which a little fatty acid has been added. The first gives a measure of the surface activity of the undecomposed soap and the second the combined surface activities of the undecomposed soap and the hydrolysis alkali. The observations of surface tension were made with a stalagmometer and the results are tabulated and shown graphically by curves. The hydrolysis of soap results in the formation of free alkali and an acid soap. Experimental evidence is given to show that the assumption that this acid soap exercises no surface activity is justified.

Another preliminary experiment was to determine the fact that KOH has practically no effect upon the surface tension against benzene which was used in the stalagmometer. From the data it is shown that in solutions of neutral soap the surface activity of the hydrolysis alkali is only about $\frac{1}{8}$ to $\frac{1}{4}$ that of the undecomposed soap. In drawing conclusions as to the relative effects of hydrolysis alkali and soap in ordinary cases of detergent action the question arises as to how the surface activity of the alkali depends upon the concentration of the oleic acid in the benzene; it is shown that the surface activity of the alkali will not vary much with the concentration of the oleic acid in the benzene, and consequently in the case of neutral or slightly alkaline soaps, the detergent action is due mainly to undecomposed soap, a fact obviously of fundamental importance in the theory of detergent action.

The view originally held was that the alkali set free by hydrolysis saponified the greasy matter on the dirty object. The hydrolysis alkali does not actually attack the acid products but the effect of this is counterbalanced by the continual decomposition of the soap, the equilibrium consisting really of a balance between these two opposing reactions. The hydrolysis alkali is capable of acting on fatty acid in an oil, though the effect of this action in producing a surface soap layer is small compared with that due to the absorption of the undecomposed soap. The view that the detergent action of soap is due to its colloidal nature suggests the idea that other colloids may possess detergent power. In the latter connection the action of "sapon" a detergent made by action of strong alkali on cereals is considered with experimental data.

The addition of alkali to a solution of neutral soap increases greatly the detergent power of the solution; the most obvious function of the alkali is to exercise its own surface activity which is generally possible, because the greasy matter met with on dirty materials contains free fatty acid. It is known that the addition of an alkali to a soap solution increases the detergent power in the case of materials stained with mineral oil. This fact is a striking verification of the view suggested by the experiments of this paper that the effect of the alkali on the "surface activity" of the soap is a factor comparable in importance with, if not more important than, the independent effect of the alkali.—Abstracted from paper by S. A. Shorter, in *Journal of Society of Dyers' Colorists*.

LANOLIN SOAPS.

In the manufacture of toilet soaps pure wool fat is principally used as a means of superfatting, either for milled soaps or for cold made cocoanut oil soaps. For superfatting only such a fat may be used that is not subject to rancidity. For this purpose Lanolin is adapted. It is, as is well known, recovered from sheeps wool, thereby deriving the name wool fat. Raw wool fat is not adapted for the above purpose, being a smeary, brown, unpleasant smelling mass. Lanolin is the best means for superfatting soaps as by being used for this purpose it is not altered (saponified) in the least. It also fulfills the desired effect in washing, as it imparts grease to the skin, and to the water used in washing.

In order to incorporate it in a soap it is necessary to liquify the Lanolin mix it with the warm cocoanut oil before adding the lye. To 60 Kg. of oil at the most 2 Kg. of Lanolin, and 2 Kg. of glycerine are taken. The glycerine may, however, be first added to the soap when the lye is completely mixed with the oil. These soaps were formerly criticized because of the fact that cold made soaps, owing to their content of free alkali content, were detrimental to the skin. Here also Lanolin produces a mild effect.

The method of making such a Lanolin soap is very simple. First of all, the soap can't be too cold. In summer the proper temperature is 24 degrees R., and in the winter 28 to 30 degrees R. One should not allow the soap to become too thick, in fact the most beautiful soaps are obtained when they are made of medium thickness until the kettle begins to heat, and then immediately dropping the soap into the frame. Tallow is never used for such a soap since the finest product obtained therefrom comes out of the frame crumbly.

A small percentage of potash lye may be used, through the employment of which the soap becomes somewhat more transparent. Iron frames are not suitable, for the soap comes into contact with the metal on the sides and bottom, and derives a dead appearance thereby, as well as appearing much lighter than the block in the middle. Wooden frames lined with linen are best adapted. When the soap is filled into the frames it is well covered, so that it may heat up itself. When the soap is taken out of the frames the block is cut into halves and one will be surprised at the completed work. The soap is beautifully smooth, transparent, and should it have been properly proportioned, not become red when a drop of Phenolphthalein

solution is placed thereon, else too much lye was used, or the lye was not properly stirred in.

Cheap Lanolin soaps are also manufactured, containing filling materials, etc. Such soaps should not be classed with Lanolin soaps for from such a soap it is required that it be free from alkali, that is to say, it should have no great excess of alkali and should not irritate the most sensitive skin.

Several formulæ follow:

LANOLIN SOAP, I.

- 60 Kg. Cochin Coconut Oil
- 28 " Soda Lye 38° B
- 2 " Potash Lye 38° B
- 2 " Lanolin

Color.

- 2 g. Uranium Yellow

Perfume.

- 200 g. Gingergrass Oil
- 100 " Citronella
- 100 " Oil Orange

LANOLIN SOAP, II (WHITE) WITH GLYCERINE.

- 60 Kg. Cochin Coconut Oil
- 28 " Soda Lye 38° B
- 2 " Potash Lye 38° B
- 2 " Lanolin (White)
- 2 " Glycerine, white. This is first added to the soap and when it is all stirred.

Perfume.

- 100 g. Oil of Geranium
- 50 " Bergamot
- 100 " Terpineol
- 150 " Oil of Lemon
- 2 " Ultramarine Blue dissolved in 200 g. boiling water.

This is added to soap to make it appear whiter.

Two formula for milled soaps follow:

LANOLIN SOAP (MILLED).

- 25 Kg. White soap base
- 25 " Soap Base
- 3 " Lanolin

Perfume.

- 100 g. Oil Geranium African
- 100 " Petitgrain
- 50 " Oil Lemon
- 175 " Oil Orange
- 45 " Tinct. Benzoin
- 5 " Cumarin
- 5 " Cananga

LANOLIN SOAP (WHITE MILLED).

- 50 Kg. Tallow soap base
- 3 " Lanolin White

Perfume.

- 100 g. Oil Linaloe
- 50 " Lavender
- 40 " Geranium, African
- 40 " Cananga
- 40 " Spike
- 30 " Bergamot
- 30 " Art. Violet
- 50 " Terpineol
- 20 " Rose Tinct.
- 2 " Ultramarine Blue

—Seifensieder Zeitung.

Potash Produced by Molasses Distillery.

The Jefferson Distilling & Denaturing Co., of New Orleans, announces that through a new process in distilling alcohol from molasses, it now produces twenty tons of potash a day.

CONFERENCE ON PALM OIL.

The Department of Commerce announces that representatives of the palm oil trade, both consumers and importers, have been in conference with officials of the Bureau of Foreign and Domestic Commerce. There was included a representation of soap makers and tin plate makers. These two industries are the principal users of palm oil. The announcement says:

"Most of the palm oil comes from the West Coast of Africa. One of the requirements of the British Government is that there shall be returned to the Government, as the price of permitting the exportation of palm oil, its equivalent in glycerine content, which is 6 per cent. This matter and that of arranging direct shipment from Africa, instead of from England, so as to conserve tonnage and eliminate unnecessary haul, are all of importance.

"The palm oil men were perfectly willing to cooperate in every way with the bureau for the facilitation of business and the elimination of useless haulage and in other matters, and the committee will commence its relations with the bureau in all matters concerning the importation of palm oil and the return of the 6 per cent. glycerine content or its equivalent in glycerine."

KING AGAIN HONORS LEVER.

Sir William Hesketh Lever, baronet, head of Lever Brothers, Limited, of Fort Sunlight, England, was made a peer of the realm of Great Britain on King George's birthday in June. Lever Brothers' Company in Cambridge, Mass., is the American company.

The new honors were conferred as a result of Sir William's activities in public life during the war. He will now be known as Lord Leverhulme. Sir William was made a Baronet in June, 1911. He also has been a member of Parliament.

Japanese Glycerine Industry Growing Fast.

The glycerine industry has attained remarkable development since the outbreak of the war. The government is now granting pecuniary aid to those engaged in this particular line of industry and the result has been the establishment of the Japan Glycerin Manufacturing Co. and several other concerns. Before the war none of these companies existed and consumers in Japan relied entirely upon imports from the United States and other countries. The output of the Japan Glycerin Manufacturing Co. alone amounts to 300 tons a month, and in the course of the next few years the imports of this commodity will, it is believed, be nearly checked.

German Soap Here for Analysis.

Dr. Georges Fourchet, who arrived in New York recently on board a French steamship, had with him several bars of soap which he said had been found in captured German trenches in Europe. The soap, he announced, would be subjected to analysis to determine, if possible, the nature of the fats from which it was made. The object is to determine the truth or falsity of various gossamer stories.

With Gossage Half a Century.

Joseph Williamson, who has died recently at the age of sixty-nine, was for half a century with W. Gossage & Sons, Ltd., soap manufacturers, Widnes, England.

Features to Be Found on Other Pages.

Readers of the SOAP SECTION may find items of interest to them in our Trade Notes pages, as well as in Patents and Trade Marks and Foreign Correspondence.

FEATURES OF SOAP MATERIAL MARKET.

(Continued from next page.)

some hands, but reacted later to \$7, which figure still marks a material advance over the price prevailing a month ago. It is with the greatest difficulty that consumers are able to trade in immediate shipment material, as second hands have such stocks under control. The 1918 position is purely nominal owing to the heavy Government business which has been put through. Soda ash presents the same strong appearance, the current level being \$2.75@2.85 for the light 58 per cent. in bags.

There is still a marked scarcity of sulphuric acid for immediate delivery. It is reported that producers are heavily booked ahead and that little resale material is coming on the market from time to time. The 60 degree pyrites acid is now held on the basis of \$20 per ton, or 1 1/4 cents per pound spot. Caustic potash is somewhat higher at from 85@90c. nominally for the 88 to 92 degrees. Carbonate of potash is also nominal, with from 35@50c. mentioned as the nominal asking price. No further movement of any importance has taken place on stearic acid, although the market has recovered somewhat from the setback, following the announcement that no additional 10 per cent. import duty would be levied.

TARIFF CLASSIFICATION IN CANADA.

The limit of value upon which is based the Canadian tariff distinction between common or laundry soap and soap not otherwise specified has been modified by an Appraisers' Bulletin of July 3, 1917, providing that hard soap, other than whale oil or castile soap, having a value of over 9 cents per pound wholesale at the place of manufacture abroad should be classified as soap not otherwise specified under tariff No. 228. The duty applicable to this class of soap upon importation from the United States is 40 per cent ad valorem, inclusive of the special war surtax, whereas common or laundry soap of a value not exceeding 9 cents per pound wholesale is dutiable at \$1 per 100 pounds plus 7 1/2 per cent ad valorem. The limit of value for common or laundry soap was fixed at 6 cents per pound by a ruling of January 21, 1913, which was increased to 7 cents per pound by a decision of June 12, 1917, and this limit has now been further increased to 9 cents per pound.

Soap Prices to Be Higher in France.

A French correspondent says: "We shall soon have to pay 3 francs per kilo. Due to the continual rise in the price of raw materials, which are daily growing scarcer, Marseilles soap manufacturers will soon be compelled to increase their prices, and, furthermore, by no means for the last time. This, however, is not due to a mere spirit of speculation. To make 1 kilo. of soap 72 per cent. of oil, costing 2.30 francs, is required. If we add to this the costs of manufacture, the manufacturers' profits, costs of transport, agent's commission, and a certain percentage for the retailer, then we shall find that we soon exceed the price of 3 francs mentioned above."

Soap \$3 a Cake in Germany.

Robert Henry Perkins, an opera singer, who arrived at an American port recently, said he paid \$3 for a cake of soap just before he left Berlin.

Finds Soap Section of Great Interest.

(From W. Hamberger, Barbara Elizabeth, Inc., Soaps, Beacon, N. Y.)

Your publication is all right and we would not want to be without the same. The Soap Industry Section is a very fine addition to THE AMERICAN PERFUMER and we believe it is of great interest.

BIGGER VEGETABLE OIL CROPS.

That there will be a greatly increased vegetable oil supply coming from the crushers this year with several hundred plants crushing the soya beans, peanuts and other oil-bearing seeds and nuts other than cottonseed, is predicted by Sam L. Rogers, director of the Bureau of the Census, in his report summarizing a survey of the manufacture of vegetable oils for edible purposes. This shows that there were 112 concerns in the United States last year engaged in the manufacture of 262,558,661 pounds of oil from peanuts, mustard seed, kapok seed, rape seed, sunflower seed, soya beans, walnuts, corn, copra, palm kernels and olives.

The following summary shows the number of establishments engaged in the production of the several oils, together with the quantity of each kind produced during the calendar year 1916:

PRODUCTION OF EDIBLE VEGETABLE OILS OTHER THAN COTTON OIL, 1916.

	No. of Establishments.	Oil Produced, Pounds.
Olive	22	1,336,674
Cocoonut	9	126,884,374
Peanut	50	26,164,869
Corn	23	93,085,391
Mustard seed, rape seed, soya bean, palm kernel, etc.....	14	15,087,353

Soap Contract for Government.

The following bids were received June 21 by the lighthouse inspector, Tompkinsville, N. Y., for furnishing 12,500 pounds fresh water soap: Granite City Soap Co., \$1,061.25, 14 days, accepted; Holbrook Manufacturing Co., \$1,250, 30 days; J. F. Donovan, \$1,437.50, 10 days; Armour & Co., \$1,706.25.

The following bids were received on June 26 by the commanding officer, Rock Island Arsenal, Ill., under schedule No. 1968 for furnishing soaps: Bid 1—The Frank Miller Co., New York City; 2—Harah & Stewart Mfg. Co., Des Moines, Iowa; 3—B. C. Hartz, Rock Island, Ill.; 4—R. M. Hollingshead Co., Camden, N. J.; 5—Smith-Worthington Co., New York City.

Item 1—26,700 lbs. saddle soap—Bid 1, 20c.; 4, 13.95c. lb., for Hollingshead, accepted; 5, 27c. per tin of 15 ozs. 2—115,000 cakes H and H soap—Bid 2, 7.85c. per 12-oz. cake of "Little Ollie Cleaner," accepted; 3, 7.5c. per 10-oz. cake H and H soap packed in paper cartons, 12 cakes per box; 7.2c. each if paper cartons are omitted, 6.74c. in trade packages.

Soap Powder Bids for the Treasury.

The following bids were received May 23 for furnishing soap powder for buildings under control of the Treasury Department during the next fiscal year: Oakley Chemical Co., 22 Thomas street, New York City, \$6.37 to \$11.22 per case of 60 12-oz. or 165 4-oz.; India Alkali Works, Boston, 8.65 cents per pound; 30 days; B. J. Johnson Soap Co., Milwaukee, Wis., 4.25 cents per pound, \$9.78 per barrel of 230 pounds; 15 days; Cudahy Packing Co., Chicago, 4.275 cents per pound, \$12.825 per barrel of 300 pounds; alternate bid, 4.625 cents per pound, \$13.875 per barrel; delivery 20 days.

New British Maximum Oil Prices.

A cablegram from the American consul general, London, says: Minister of Munitions substitutes following maximum prices as from June 20: Pharmaceutical castor oil, per ton, £88 (\$428); ordinary castor oil, £80; bleached palm oil, £50; unbleached palm oil, £44; for oil net naked ex ship, mill or warehouse in United Kingdom.

MARKET REVIEW ON TALLOW, ETC.

(Specially written for this journal.)

During the past month, the tallow market has been heavy in tone, with a constantly declining tendency. From the highest price, viz., 18½¢ for New York Special in drums on the recent upward movement values have steadily receded, with sales on the 16th inst. of 300 drums New York Special City Tallow at 16¾¢. per lb.

The western markets have been sluggish, and weaker in tone, lately, than the eastern. Large shipments of South American Tallow as well as of Oleo Stearine bought at higher prices, are now arriving here, and the general feeling among soap makers is to wait until supplies require replenishing.

The feeling all over the country is against speculation in commodities; and with the price regulations by the Government, as well as the recent extension of the embargo against exports to cover practically every type of fat stocks, it is but logical that the fat markets should be weak in tone.

Prices are likely to go lower, owing to the disposition of producers to accept the best price obtainable; but it is not likely that prices will decline very much—say, several cents per pound.

We hear that a process has been discovered for making glycerine from sugar; if so, it must eventually have a distinct bearing on the value of fat stocks generally.

The latest reports from Germany, if true, indicate no early peace; and if the war continues until next spring or summer, we are not likely to see very low prices for either greases or tallow. In the meantime, we look for a further decline in prices with the probability that New York Special Tallow will sell at 15¾-16¢. per pound before the movement halts. TOBIAS T. PERGAMENT.

July 17, 1917.

GLYCERINE.

Specially Written for This Journal by W. A. Stopford.

Since our last letter the glycerine market has gradually worked to a higher level. The powder manufacturers have found it necessary to come into the market several times for dynamite, and on each occasion they have had to pay a premium over the previous purchase. A large sale of this grade, for export, is rumored to have taken place, and if it is so, available supplies for this year are very small. The downward tendency of fats and oils would ordinarily influence the price of glycerine, but now, while tallow at 16¾¢. is at the lowest point that it has been for some time, glycerine is at its highest level, and indications are that it is by no means at the top. Chemically pure has advanced 2¢. per lb.; the rise would have been greater had there not apparently been a determined effort to keep it down on the part of certain refiners, who evidently sought to prevent a too rapid inflation of raw material values. Today the price is 63¢. in drums, and 64½¢. in cans.

Vegetable Oils.

Unsettled conditions have prevailed in the market for vegetable oils, verifying predictions made thirty days ago, which pointed to the fact that the highest prices for 1917 were yet to be seen. The uncertainties with refer-

ence to the Government's attitude as to the granting of export permits for cottonseed, cocoanut and other oils has brought about easier conditions in some directions, and has produced a tendency on the part of buyers to enter the market only on a hand-to-mouth basis pending developments with regard to the export prohibition. It is known that large quantities of oils of all kinds were absorbed by speculators earlier in the year, who managed to reap vast profits on an advancing market. Whether the Government will endeavor to fix values in proportion to the abnormally high levels which were reached is a subject for conjecture.

There is a belief in well informed circles that second hands parcels arriving here during the next fortnight may be forced on the market at concessions. It is recognized that legitimate consumers should encounter little difficulty in securing adequate supplies, as railways will again be in position to forward goods promptly when guaranteed that the goods are for local consumption and not for export. Cables on soya bean oil have been firm on the future position, and the freight situation will be the chief item to be considered on oil from the Orient to arrive at Pacific Coast ports August to December, inclusive. In the cocoanut oil market, a somewhat easier tone has developed on domestic grades, but foreign kinds have been in small supply and are merely nominal.

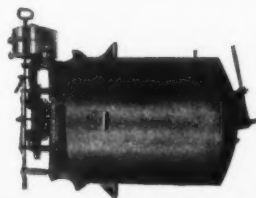
Heavy Chemicals

So thoroughly sold ahead are most of the important heavy chemicals utilized in the soap making and allied trades that few parcels of resale material have reached the market from second hands. The general demand has shown some slackening, but it is noteworthy that first hands in the majority of instances have been disinclined to name 1918 prices owing to the heavy bookings already on hand. Interest has attached chiefly to the maintenance of the strong position of the alkali materials. Caustic soda touched \$7.75 per 100 pounds in

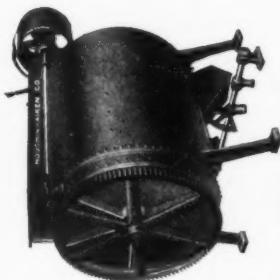
(Continued on preceding page.)

SOAP MATERIALS.

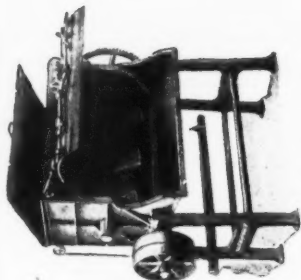
Glycerine, C. P., 63@65¢.
Dynamite, 62½@65¢.
Crude, soap lye, 80 per cent. loose, 44¢.
Saponification, 80 per cent. loose, 48½¢.
Castor Oil, 24@27¢.
Cocoanut, Cochín, nom.; Ceylon, 18¢.
Cocoanut oil, domestic Cochín, 17½@18¢.; domestic Ceylon, 15¾@16¢.
Corn, crude, 14@14½¢. nominal.
Cottonseed, crude, tanks, \$1; refined, \$15.05.
Olive, denatured, \$1.70@1.75; prime foots, 19@20¢.
Palm, Lagos, 18@18½¢.; red prime, 17@17½¢.
Palm oil, domestic, 16½@17¢.
Peanut, \$1.35@1.40.
Soya bean, 14½@15¢. nominal.
Tallow, special loose, New York, 16¾¢.; tallow, city, 16¼¢.; grease, yellow, 15¾@16¢.; brown, 14¾@15¢.
Chemicals, etc., Borax crystals and granular, 8@8½¢.
Caustic potash, 88 to 92 per cent., 85@90¢.
Caustic soda, 76 per cent., \$7@7.25 per 100 pounds.
Carbonate potash, calcined, 80 to 85 per cent., 35@30¢.
Red oil, saponification, 14½@15¢.
Salt, common, fine, \$1.08@2.10.
Soda ash, 58 per cent., \$2.75@2.85 per 100 pounds.
Soda silicate, "iron free," 3½@4½¢.
Sulphuric acid, 60 degrees, \$19@20 per ton.
Starch, pearl, \$2.85@2.91; powdered, \$2.90@3.
Stearic acid, single pressed, 23¢.
Stearic acid, double pressed, 24½¢.
Stearic acid, triple pressed, 26¢.
Zinc, oxide, American, 11½@15¢.
Rosin, water white, \$7.60 per barrel.
Rosin, window glass, \$7.50 per barrel.
Rosin, Nancy, \$7.35 per barrel.
Rosin, Mary, \$6.85 per barrel.
Pine oil, sweet, 69@71¢.



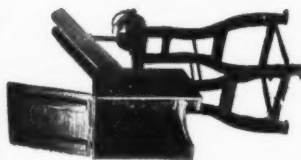
PERFECTION Cutter.



HORIZONTAL Crutcher.



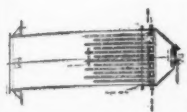
IDEAL Amalgamator.



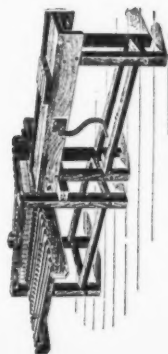
Soap Chipper.



STANDARD Soap Frame.



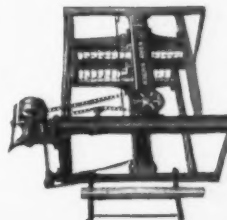
ACME Remelter.



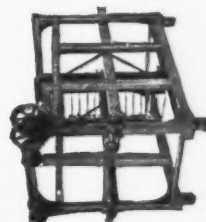
DOUBLE RACK Cutter.



AIKEN Power Cutter.



AIKEN Power Slabber.



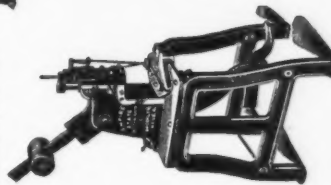
CHAMPION Slabber.



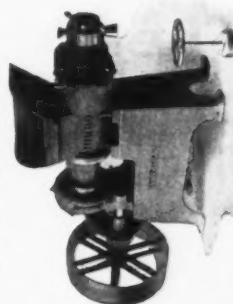
No. 4 Soap Press.



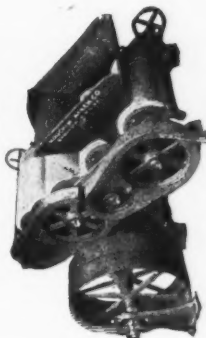
Soap Dies.



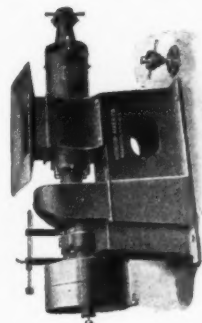
EMPIRE STATE Soap Press.



4, 6, 8, and 10-Inch Screw Soap Plodder.



2-, 3- and 4-Roll Soap Mills.



TYPE "P" Plodder.

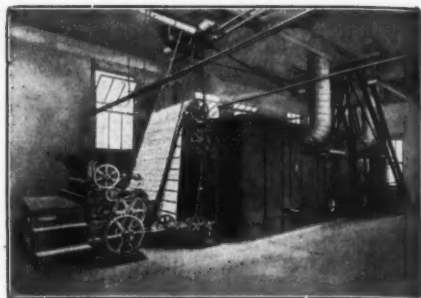
HOUCHIN-AIKEN CO. INCORPORATED ENGINEERS AND MACHINISTS SOAP MACHINERY

Kettles, Crutchers, Frames, Slabbers, Cutters, Remelters, Presses, Chipppers, Mills, Plodders, Soap Dies, Perfume Mixers

GLYCERINE MACHINERY
Plans and Specifications for Plants—Old Plants Remodeled
BROOKLYN, N. Y.
115 to 121 Fifty-third Street

The Drying of Soaps

If you were to take a peep into all the soap factories in the United States you would see more than 100 **"PROCTOR" AUTOMATIC CHIPPED SOAP DRYERS** operating. And as evidence of their merit you would see many plants using several of them.



Proctor Soap Cooler, Crusher and Dryer.

We also build a dryer for Bar Soaps and a Soap Powder Machine.

Send for Catalogue and List of Users.

Address Dept. S.

"Proctor"
DRYERS

THE PHILADELPHIA TEXTILE MCHRY. CO.

Builders of Drying Machinery

Philadelphia

Chicago, Ill.
Lytton Building

Providence, R. I.
Howard Building

TERPINEOL PURE
BENZYL ACETATE
BENZALDEHYDE
BERGAMOT ART
BENZYL BENZOATE

and other specialties for

SOAPMAKERS

VAN DYK & CO.

Factory: JERSEY CITY.

4-6 PLATT ST., NEW YORK

THE ESSENTIAL OIL SPECIALTIES CO.

INCORPORATED

GRASSLAND

DELAWARE CO., PA., U. S. A.

(Near Philadelphia)

TERPINEOL

STRICTLY HIGH GRADE WATER FREE
CHEMICALLY PURE

Samples and prices on request

EDWIN H. BURR, Sole Agent, 18 Cedar St., New York

We Specialize in

COCONUT OIL

and ask to be permitted to figure with
consumers for their requirements

ELBERT & COMPANY

71 Wall St., New York

Telephone—Hanover 1309

Do Business by Mail

Start with accurate lists of names we furnish—
build solidly. Choose from the following or any
others desired.

Apron Mfrs.	Wealthy Men
Cheese Box Mfrs.	Ice Mfrs.
Shoe Retailers	Doctors
Tin Can Mfrs.	Axle Grease Mfrs.
Druggists	Railroad Employees
Auto Owners	Contractors

Our complete book of mailing statistics
on 7000 classes of prospective customers free.

ROSS-GOULD, 808-Y Olive Street, St. Louis

Ross-Gould
Mailing
Lists St. Louis



CLASSIFIED ADVERTISEMENTS

On account of our wide circulation among manufacturers, dealers, importers, etc., of perfumery, soaps, toilet specialties, flavoring extracts, etc., our readers will find this column a quick and satisfactory means for advertising temporary matters. For help and situations wanted this service is free to advertisers and subscribers, to all others 25c. per line per insertion. Cash with order. Address all communications to

PERFUMER PUB. CO., 80 Maiden Lane, New York.

BUSINESS OPPORTUNITIES

NEW ART.

Everybody concedes that my laboratory utensils and fixtures rival in beauty of outline and decorative effect the art products of semi-oriental design as shown in exclusive art stores on Fifth Avenue.

My models—very quaint, very odd and cute—were all produced with the aid of a penknife, hammer and saw and the material used consisted of waste products only—odds and ends—such as I found in dirt rollers and ash cans.

Who is willing to engage in light manufacturing and finance and exploit my art?

Vast possibilities! Laboratories, window displays, porches, florists, cozy corners, interior decorations, etc. Address Edward Eggers, 49 East 30th St., New York City.

ILLNESS compels sale of increasing, fine paying business, making high class Toilet Preparations and Perfumes, located in New York, established 10 years. Only reasonable price expected. Rare chance. Address B. O. No. 445, care of this journal.

WANTED—5 to 15 lbs. Austrian White Ceresin Wax or White Ozokerite, purest. A used hand-power mixer and paste filler. If you so desire, you can have Otto of Rose Coumarin, Diphenyl Oxide, etc., at low prices for exchange. Mail sample Wax. Address B. O. No. 446, care of this journal.

HELP AND SITUATIONS WANTED

WANTED—For a large soap and perfumery factory in Mexico experienced soap maker and perfumer; state if acquainted with Spanish or French. Address P. O. Box 1622, New York.

PERFUMER having twelve years' laboratory experience blending oils for perfumery and toilet preparations, will consider good proposition with oil house or concern manufacturing perfumery and toilet preparations. Also competent bookkeeper and systematizer. Highest credentials. Address S. W. No. 442, care of this journal.

POSITION WANTED by a superintendent of all grades of soaps. Understand the splitting of all fats and distillation. A practical glycerine man on recovery and reining. Knowledge of chemistry. Address S. W. No. 441, care of this journal.

EXPERIENCED PERFUMER and toilet goods chemist seeks connection with progressive, reliable house. Long experience also as pharmaceutical chemist. Address S. W. 448, care of this journal.

CHEMIST WANTED—Experienced technical man for organic research and synthetic chemical work. Give all details as to education, experience, and what products you have made, etc. A man who can qualify, living in the vicinity of New York city, will have an opportunity for a bright future. Furnish all information in first letter. Address H. W. 443, care of this journal.

SALESMAN, experienced, and at present in the capacity of opening new accounts, is desirous of connecting with a firm who wishes an outside man with original ideas. Address S. W. No. 444, care of this journal.

MANUFACTURING CHEMIST and perfumer in charge of the largest perfume laboratory in Canada would connect with an American house anticipating manufacturing in Canada. Address S. W. No. 447, care of this journal.

BUYER who has been with a New England wholesale drug house for 10 years, wishes to make a change. Has handled the buying for the chemical, drug, manufacturing, essential oil and pharmaceutical end of the business, besides being in charge of the laboratory. Married, age 38; is registered Pharmacist. Address S. W. No. 451, care of this journal.

PERFUMER AND CHEMIST (B.Sc.) nine years' practical experience in perfumes, toilet articles and pharmaceuticals, now employed in the West, for good reasons, is desirous of locating in or around New York. Thoroughly competent in the perfection of formulas, creating new preparations, designing of packages, cost regulation, and well posted on present market conditions. Lowest consideration \$3000 a year. Address S. W. No. 450, care of this journal.

PERFUMER with wide experience in manufacturing perfumes and toilet preparations wants position as assistant in laboratory. Not employed at present. Address S. W. No. 449, care of this journal.

Essential Oil Analyses

Get in touch with us for quick and reliable analyses by latest official methods.

R. O. BROOKS

191 Franklin Street NEW YORK

Phone Franklin 3554

"COLLAPSIBLE
TUBES and
everything for
their use"



Don't forget that the STANDARD KEY
is—"THE KEY-TO-THE-SITUATION"
ASK US ABOUT IT

Collapsible Tubes ALL SIZES Plain and Decorated

Your present label reproduced directly on the Tube, or we will prepare new designs and submit for your approval.

Advise us the size tubes you desire and let us send you samples—Our prices will surprise you

Standard Specialty and Tube Company

MANUFACTURERS OF
Collapsible Tubes and Metal Specialties
New Brighton, Pa.



No. 116 No. 47 No. 167 No. 148

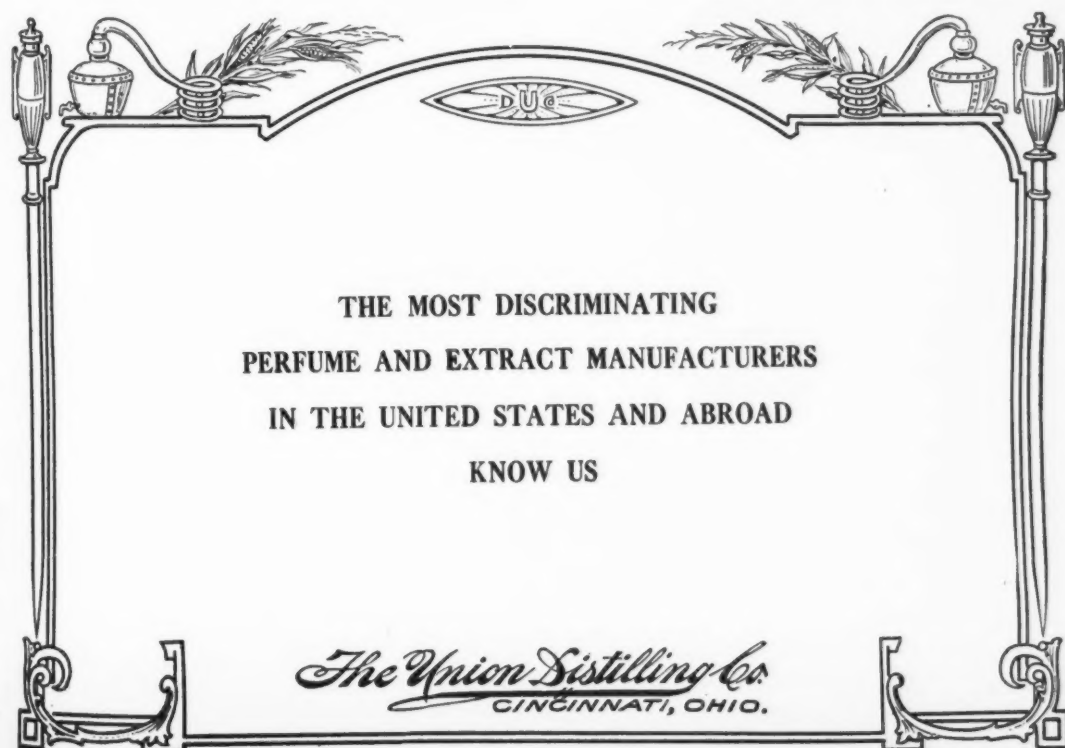
BRASS GOODS MFG. CO.
290 Nevins St., Brooklyn, N. Y.

Designers and manufacturers of Sheet Metal Specialties—such as Caps for Talcum and Tooth-powder Cans and Jars, in Brass—Polished, Nickelplated, etc.—and other metals.

Send us a description or drawing of what you want; or a sample of what you are using and we will submit quotations.

No. 171—OPEN. (Pat.) No. 138. No. 188—CLOSED. (Pat.)

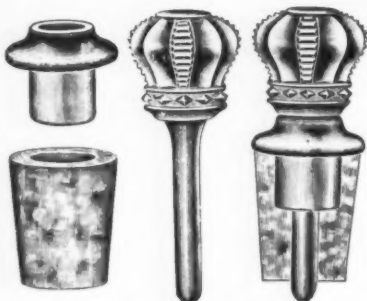
No. 162—SELF-CLOSING CAP.



THE MOST DISCRIMINATING
PERFUME AND EXTRACT MANUFACTURERS
IN THE UNITED STATES AND ABROAD
KNOW US

The Union Distilling Co.
CINCINNATI, OHIO.

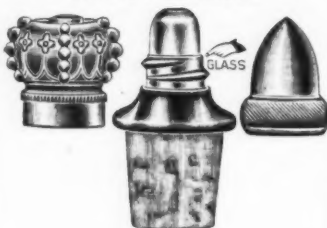
SWINDELL'S IMPROVED ALL GLASS SPRINKLER



PAT. APPLIED FOR

This represents our latest and best effort in making an all Glass Sprinkler. Its merits speak for themselves. There can be no corrosion and the seal is so perfect that leakage is impossible.

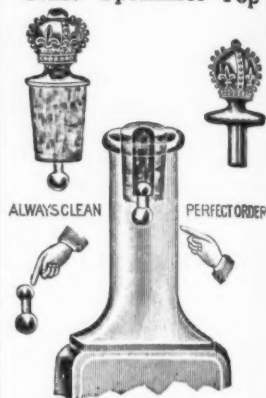
Perfect Glass Sprinkler CANNOT CORRODE



PAT. APPLIED FOR
PERFECT GLASS SPRINKLER
A beautiful combination of glass
spout and metal top.

OUR LINE OF
GLASS SPRINKLERS

THE BRAUNER PATENT SELF-CLOSING Glass Sprinkler Top



BRAUNER
Patent self-closing glass sprinkler top. For those who want a cork and glass plug.

SWINDELL BROS.

Baltimore, Md.

New York Office: 200 Broadway

Makers of the well-known DIPOLI (Frosted) and other perfume bottles

WHAT DOES IT MATTER



Whether you have boxes that are of high quality, or whether only of mediocre quality?

That's a question you say is too foolish for reply. So do we.

You want the best to be had for your money. You know that an article put out in nice shape is half sold. One of the main things for a manufacturer of toilet articles to give attention to is the way his article is packaged.

When you give us your orders for boxes for Face Powder—Talcum Powder—Rouge and boxes for similar uses, you know that you are not dealing with an unknown, or untried concern. Our many years' experience in serving some of the largest institutions in the country has proven that we furnish the quality that pleases.

Try us the next time you want any boxes for your toilet articles.

F. N. BURT COMPANY, Limited

Paper Box Makers of Good Quality

BUFFALO, N. Y.

Chicago Office—L. E. Randall, No. 23 N. Franklin St. New York Office—C. M. Boscowitz, New York Athletic Club
Philadelphia Office—Max E. Berkowitz, No. 603 Chestnut St.

J. MÉRO & BOYVEAU**GRASSE (Est. 1832) FRANCE**

Pure Oils
"just as they run
from the Stills".

not
"made to answer
the tests"

FLORAL ESSENCES

Liquid, Solid, Absolutes

POMADES

Orders should be placed now for November delivery from 1917 crop.

ESSENTIAL OILS

Lavender	Boise de Rose
Geranium—Algerian, Bourbon	Thyme—White, Red
Rosemary	Neroli
Vetivert—Indian, Bourbon	
Ylang-Ylang	
Lemon	Bergamot
	Orange

From Our Messina Works

Sole Agent for the U. S. A.

RUSSELL &

99-101 BEEKMAN STREET

COMPANY

NEW YORK

LAURIER**SYNTHETICS AND
AROMATIC CHEMICALS****INCENTIA**

This excellent product is a fixative and an aromatic base. Your Oriental and heavy Bouquet effects can be improved by using INCENTIA "Laurier." Ask for sample.

VIOKENO

A new Violet Base, especially recommended for Perfumes and Toilet Waters; not too good for soap.

OTTO ROSE

"Kiril Kristeff" Brand

M. & K. Kristeff Co.

Stara-Zagora, Bulgaria

SOLE AMERICAN AGENTS

RUSSELL &

99-101 BEEKMAN STREET

COMPANY

NEW YORK

Phone 1514 Beekman

TRIAL OUNCE OF
JACINTH
\$1.75

A POUND OF
JACINTH
\$22.50

UNDER PRESENT CONDITIONS

Any Jacinth is of interest to you; but a Jacinth of the character, strength and delicacy of our product is mighty interesting, now and at all times.

Try an ounce, a pound, ten pounds—any quantity—so long as you try some.

You are going to use it right along, no matter how little you buy to begin with.

FRIES & FRIES
CINCINNATI MANUFACTURING CHEMISTS NEW YORK

**COMPAGNIE
DUVAL**

177 WILLIAM ST., NEW YORK

TO MANUFACTURERS OF
**Perfumes, Soaps
and Toilet Articles**

Write for Samples and Prices of our
AMERICAN MADE

**SYNTHETICS
AND
SOAP OILS**

Before Placing New Orders or Contracts
Highest Strength and Purity

We are pleasing some of the largest
Manufacturers. Why not you?

SAMPLES AND PRICES ON APPLICATION

**Better
Boxes
and
Cases**

For the
Manufacturing
Perfumer

We have originated many of
the best boxes in use

among which are the popular

Snap Button Paper Boxes

Face Powder Boxes with Drum Pouches

Face Powder Boxes with Easy Filling

Non-Leaking Powder Container

Mirror Snap Button Paper Boxes

Our finest types of Boxes are unsurpassed by foreign makes.

Address Inquiries to No. 1133 Broadway, N. Y.

LORSCHIEDER-SCHANG CO.

Incorporated 1903

New York City and Rochester, N. Y.

CHEMICALLY PURE

TERPINEOL



GEO. V. GROSS & CO.

NEW YORK

PERFUMERS' and SOAP MAKERS' RAW MATERIALS and Synthetics

ZINC OXIDE

BEESWAX

STEARIC ACID

MAGNESIUM CARBONATE

EPSOM SALTS

SODA ASH

CAUSTIC SODA

A. C. DRURY & CO.

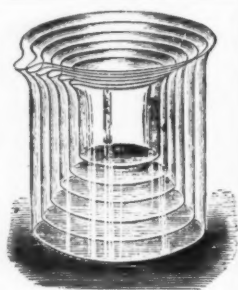
29 W. Kinzie Street

CHICAGO

A FULL LINE OF PHARMACEUTICAL AND HEAVY CHEMICALS

CHEMICALS and Apparatus

on hand, and ready for
immediate delivery.



J. T. Baker's C. P. Chemicals
Merck's H. P. Chemicals and Reagents
Coor's Porcelain Ware
Nonsol and Macbeth Beakers and Flasks
C. Becker and Troemner Balances
"Desco" Accurate Thermometers and Hydrometers

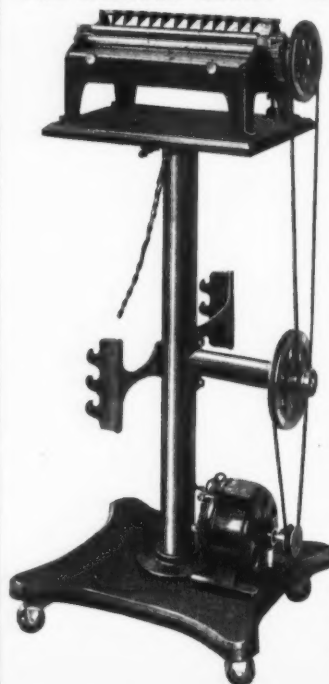
We make special apparatus in glass, graduated and blown ware.

We are familiar with numbers and names from all the catalogs.

DEEGAN SUPPLY CO.

33-35 W. KINZIE ST., CHICAGO

THE CARLSON GLUER—MOTOR DRIVEN



Hitch the Gluer to
a light socket.

PORTABLE
ADJUSTABLE
COMPACT

SPEED
EFFICIENCY
SIMPLICITY

LABEL GLUING BY MACHINE

The Carlson Gluer
is used successfully
in many lines of
manufacture.

Send for descrip-
tive circular.

Manufactured and
sold by

MILWAUKEE PAPER BOX CO.

Makers of
Brain Built Boxes
400 FLORIDA ST.
MILWAUKEE, WIS.

Rouge &
Powder Compacts
Eyebrow Pencils
Lip Sticks

GREASELESS & VANISHING CREAMS IN BULK

Send for Samples

H. L. BAKER & CO., Rochester, N. Y.

Liquid &
Pomade Rouge
Nail Polish
Enameline

Compact Rouge Machinery

MANUFACTURING PROCESSES, PERFUMERY, TOILET
PREPARATION FORMULAE. FACTORY EFFICIENCY.
A. ALEXANDER, 188 St. Nicholas Ave., N. Y. C.

COLLAPSIBLE TUBES of Pure Tin Filling, Closing and Clipping Machines



45 Locust St.

BLOOMFIELD, N. J.



WE GUARANTEE

HIGHEST QUALITY

STEARIC ACID

HARD, WHITE, ODORLESS

RUB-NO-MORE-CO.

FT. WAYNE, IND.

Plymouth Brand Guarantees Quality

PLYMOUTH STEARATITE (ZINC STEARATE)

An improvement on all other Stearates. A
wholesome, velvety improver for Talcum and Face
Powders.

PLYMOUTH WATER WHITE "F"
COLD CREAM NEUTRAL OIL

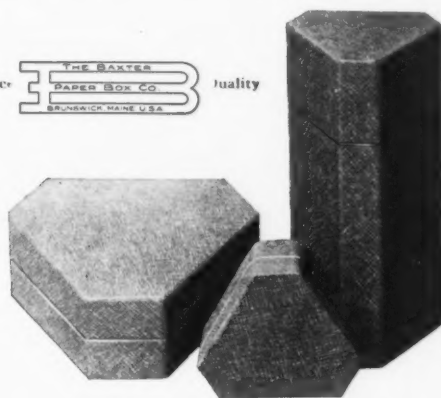
PLYMOLINE

(Petroleum Molle Russian Style)

CERESINE WAX

**M. W. Parsons Imports
and
Plymouth Organic Laboratories**
65-67-69 ANN ST. New York

Service Quality



DESIGNERS AND MANUFACTURERS

OF

PAPER BOXES

We duplicate your sample or build model to
your specifications.

Our service is yours for the asking.

THE BAXTER PAPER BOX CO.
BRUNSWICK, MAINE, U. S. A.

Paraffine Waxes

ALL GRADES

Stearic Acid

Vegetable Oils
Petrolatum Chemicals

Cotton Seed Soap

65%

J. C. FRANCESCONI & CO.

EXPORTERS, IMPORTERS and
MANUFACTURERS' AGENTS

25 Beaver Street New York, N. Y.

Cable Address: "HENFRAN," N. Y. (All standard codes used.)

THE INITIAL SOURCE OF SUPPLY

AMERICAN DRUGS: Collected where they grow,
AT OUR HOUSE AT MARION, NORTH CAROLINA

FOREIGN GOODS: Imported Direct by Us,
AT OUR OFFICES AND WAREHOUSE. NEW YORK CITY

EIDERDOWN POWD. SOAP

NEUTRAL BLAND, ODORLESS AND TASTELESS

Best for Tooth Powders and Pastes.

LESS LIABLE TO RANCIDITY THAN CASTILE AND CHEAPER
WRITE FOR SAMPLE AND PRICES

LAVENDER FLOWERS
ORRIS ROOT FLOR. & VERONA
HENNA TRUE EGYPTIAN
SANDALWOOD POWDER
QUINCE SEED, ETC., ETC.

ASK FOR OUR PRICE LIST AND MANUAL

S. B. PENICK & COMPANY, Inc.

FOREIGN CRUDE DRUGS DOMESTIC
WHOLE AND MILLED

254-256 FRONT ST. NEW YORK CITY
Warehouse Also at Marion, N. C.

GEORGE SCHMITT & CO. INC.

SUCCESSORS TO

SCHMIDT & CO.

Art Lithographers and Printers

ESTABLISHED 1874

PERFUME LABELS, CARTONS
AND DISPLAY SIGNS
OF EVERY DESCRIPTION
OUR SPECIALTY

GRAND & FLORENCE STS.

BROOKLYN, N. Y.

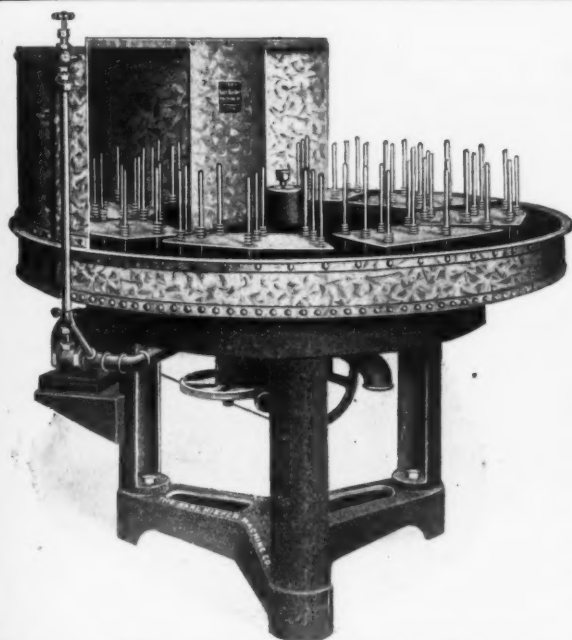


We beg to advise all users of Powder Puffs for Compact Powders that we are now in a better position than ever to supply their requirements of "VANITY POWDER PUFFS," as our French Manufacturer has, within the last two months, made very large shipments to us.

We will be pleased to send samples and quotations upon request.

MAURICE LÉVY, 15-17 W. 38th ST.
NEW YORK

Importer and Manufacturer of Powder Puffs, Eye-brow Pencils, Lip Sticks, Nail Polish,
Eye-brow Brushes, Etc.



Don't Wash Your Bottles By Hand—

It takes too long to do it, and the labor is too expensive.

The bottles are more thoroughly washed and at one-fifth the expense on a

KARL KIEFER CONTINUOUS BOTTLE WASHER

than by any other system. One of the machines has recently been supplied to a large drug house in Detroit, and they handle on the one machine bottles ranging in size from

TWO DRAMS TO ONE GALLON

Shipped complete, ready for service.

Capacity of 40 to 80 bottles per minute.

THE KARL KIEFER MACHINE CO.

CINCINNATI, U. S. A.



DECORATED TIN PACKAGES

ESPECIALLY FOR TALCUM, TOOTH
POWDER AND OTHER PREPARATIONS
REQUIRING THIS TYPE OF CONTAINER.

BUY SECURITY ALSO. A LARGE
AND WELL-EQUIPPED PLANT BACK
OF YOUR REQUIREMENTS FOR 1918.

The Tin Decorating Co.
Of Baltimore, Maryland

CAUSTIC POTASH

(All Tests)

Essential and synthetic oils, va-
nilla beans, etc. Raw materials
for soap and perfume manufac-
turers.

DUREX CHEMICAL CORPORATION
320 Fifth Avenue
New York City

A. D. SMACK CO.

80 John St.,
NEW YORK

ALL GRADES OF
VANILLA BEANS
TONKA BEANS

GUMS

Arabic Tragacanth
Crude and Powdered

POWDERED KARAYA GUM

The TRADE MARK



of RELIABILITY

MANUFACTURERS AND
IMPORTERSESSENTIAL OILS,
VANILLA BEANS and
FINE CHEMICALS

WE OFFER AT ADVANTAGEOUS PRICES:

Chlorophyll
(ALL GRADES)Safrol
MentholThymol
Benzaldehyde

Terpineol

Colors for Perfumers and Soapmakers

Floral Oils - Floral Waters

OILS OF

Camphor Myrbane Sandalwood Geranium Citronella
Sassafras Bergamot Lavender Etc. Etc. Etc.**MAGNUS, MABEE & REYNARD, Inc.**

257 PEARL STREET, NEW YORK

THE MODERN FORMULARY

BY

W. L. CUMMINGS, Ph. D.

*A Newly Revised and Reliable Book
of Formulas and Processes*

Price \$3.00 postpaid

PERFUMER PUBLISHING CO.
80 MAIDEN LANE, NEW YORK

WEIGHT LABELS

Lithographed in gray, blue and gold.
All size markings from 2 oz. to 1 gal.
Single thousand \$1—Larger quantities
at lower rates.Adopted by Perfumers' Assn.
Approved by N. Y. State Board**High-Class Labels, Seals and Cartons**Many packages having the
largest sale are our work.

Gray Litho. Co., 70 Fifth Ave., New York

TALC

HIGHEST GRADE

Buy Direct of the
UNION TALC CO.

MANUFACTURERS

132 Nassau St.

New York

SCHMOLLER & BOMPARD, GRASSE, FRANCE

HIGHEST CLASS CONCRETES, POMADES and ESSENTIAL OILS



SOLE AMERICAN AND CANADIAN AGENTS

E. J. SCHMIDT & CO., Succ. to Leerburger Bros.

Makers of L. B. and ESCO FLAVORS.

59 Fulton Street, New York

PIERRE LEMOINE
128 WATER ST. NEW YORK
SUCCESSORS
MANUFACTURING CHEMISTS
IMPORTERS & EXPORTERS.

↓

You Will Be Satisfied

By the use of

Oil Heliotrope Blossom "P. L."	lb. \$22
Oil Lilac "P. L."	lb. \$20
Oil Narcissus "P. L."	lb. \$15
Oil Rose Artificial "P. L."	lb. \$34
Oil Syringa "P. L."	lb. \$15
Oil of Ylang Ylang "P. L."	lb. \$23

Etc., Etc.

ANNOUNCEMENT

We have the good fortune to announce the representation for America of the French firm of A. Leroy et Cie., manufacturers of Synthetics, Aromatic Chemicals and Organic Perfumery Bases, and are now prepared to fill orders for the following products.

AUBEPINE	MUGUET
BENZALDEHYDE F. F.	MUGUET FLEUR
CL.	NEROLI BLANC
BENZYL ACETATE	NEROLI S.
" BENZOATE	NOVOLONE (KEYTONE
" ALCOHOL	VIOLET)
BERGAMOT SYN.	OEILLET
CITRONELLOL	OEILLET FLEUR
GERANIOL CP.	RHODINOL
" PR.	ROSE ROUGE
" TECH.	ROSE SYN.
GERANIUM, SYN.	SYRINGUET
HELIOTROPE CONCRETE	TERPINEOL PURE
JACINTHE ROSE	VIOLETTE ALPHA
JASMIN BLANC	VIOLETTE METHYL
JASMIN FLEUR	VIOLETTE VERT
JASMIN SYN.	VIOLETTON
LILAS FLEUR	VIOLINE
LISONE (LILY BASE)	YLANG YLANG SYN.

Your inquiries are solicited

Edward T. Beiser Company

353 Hecla Ave.

Detroit

Natural and Synthetical Products Produced by Reliable Makers

Natural Flower Perfumes
Geranium, African and Bourbon
Bois de Rose Femelle
Ylang Ylang Manila
Sun Bleached Beeswax

Neroly Bigr. Petales
Neroly Synthetic
Civet Synthetic
Hyacinth Synthetic
High Grade Stearines

Raw Materials for Perfumers, Makers of Toilet Preparations and Soaps

INNIS, SPEIDEN & CO.**46 Cliff Street, New York**

Branches: CHICAGO

BOSTON

PHILADELPHIA

1864

1917

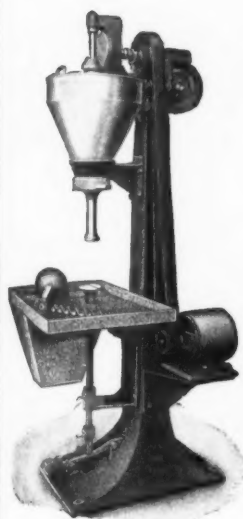
H. Marquardt & Co., Inc.

OVER FIFTY YEARS
DIRECT RECEIVERS

Vanilla Beans

35 S. William St.
NEW YORK CITY

Write Us Before
Buying Elsewhere



STOKES Powder Filling Machines

are packing most of
the best makes of

Toilet Powders

on the market.

They handle any shape
of container

Rapidly and Accurately

Send for circular

F. J. STOKES MACHINE COMPANY
PHILADELPHIA, PA.

Pedro Tremari, SUCESORES

MAIN OFFICE: PAPANTLA, VER. MEXICO
BRANCH: VERACRUZ CITY, MEXICO
54-56 STONE STREET,
NEW YORK

Specialists in

MEXICAN VANILLA

Growers, Curers,
and Exporters

JPT and MM Brands



MANUFACTURERS OF
Embossed Paper
Glassine, Gelatine and Wax
Papers

EMBOSSSED SEALS AND LABELS

SAMPLES SENT ON REQUEST

DRAGON PAPER MFG. CO., Inc.
48 W. 15th ST., NEW YORK

Headquarters on

WAX all kinds

Beeswax, white and yellow

Stearic Acid, Bayberry Wax, Ceresine, Carnauba,
Paraffine, Water-White Mineral Oil, Spermaceti,
Japan Wax

Pearl Floor Wax Polish

We solicit your inquiries

E. A. BROMUND CO.,
356 West Broadway New York City

Join the Ranks of Progressive Perfumers

and try our

GIROFLE B.

(Made in the U. S. A.)

A new base for a new perfume!
Samples cheerfully submitted.

VAN DYK & CO.

Pioneer Manufacturers of Synthetics

4-6 PLATT STREET
NEW YORK CITY

Chicago Representatives:
COOPER & SHUESLER
8 S. Dearborn St.

ROLLING MASSAGE CREAM TOOTH PASTE AND SHAVING CREAM

in bulk. We manufacture for some of the largest users in this country and Canada, and shall be pleased to know your requirements and to submit samples and prices.

C. H. STUART & CO., Perfumers and Mfg. Chemists, Newark, New York

LET US SUPPLY YOU IN BULK, or in Packages, Under Your Own Label

Concentrated Food Flavors, Food Colors, Sachet Powder, Hair Tonic, Massage, Cold, Dental and Shaving Creams, Ink Tablets, Foot Powder, Shampoo Powder, Corn Treatment, Iron Rust & Stain Remover, Baking Powder, Face Powder, Talcum Powder, Soft Drink Flavors, Liquid Vanilla, Perfume, Home Remedies, and Silver Polish.

We supply some of the largest users in the country and would appreciate the opportunity of supplying your wants. Tell us what you are interested in and we will submit samples and special prices.

A. N. CHRISTY & CO.

Dept. W. Newark New York State

VANILLA BEANS

MEXICANS

BOURBONS

TAHITI

TONKA BEANS

FRUIT FLAVORS

RUSSELL & COMPANY

101 Beekman St.



New York City

EVERGREEN CHEMICAL CO.

171 BROADWAY

Established 1898

NEW YORK

The only

EXCLUSIVE HOUSE

for

BLENDED PERFUME OILS

Used for

TOILET ARTICLES, PERFUME EXTRACTS, TOILET WATERS, Etc.

QUALITIES SUPERIOR—COSTS LOWEST

We can prove this, if given the opportunity.

Write for price lists and booklet of formulae, stating also what you are interested in.




ART

LABELS

BOX TOPS

• AND •

SEALS.

Of Character

- GOLD STAMPING •
- EMBOSSING •
- COLOR PRINTING •

QUALITY & SERVICE



SUPERIOR SEAL & LABEL CO. INC.

1931 BROADWAY,
NEW YORK.

Sethness Company

DISTILLERS OF

**OLEO
RESINS
OF**

Orris
Ginger
Lovage
Capsicum
Celery
Coffee
Horehound
Vanilla

EXTRACT MAKERS HEADQUARTERS

ESSENTIAL OILS AND FLAVORING MATERIALS

718-720-722-724 N. Curtis St., Chicago

HEADQUARTERS FOR

**Essential Oils
Synthetics and
Rare Chemicals**

If interested in
Rose, Violet, Lilac,
Bouquet odors, etc.,
write for prices and
samples.

L. A. VAN DYK

Manufacturing Chemist

90 W. Broadway
New York

440 S. Dearborn St.
Chicago

WHITE MINERAL JELLY

For cold cream, camphor ice, beauty cake, etc.

SELECT CREAM OIL

For cold cream. Stands tests for low acidity and carbonizable matter.

PETROLATUMS

All grades.

PURIFIED**PETROLATUM OIL**

Medicinal—white, odorless and tasteless.

LIQUID SOAP BASE

A cocoanut oil base for liquid soap and shampoo. Complete formula for the asking.

TAR SHAMPOO BASE

For making tar shampoo. Ask for formula.

Samples on application.

PENNSYLVANIA OIL CO.

173 N. Green Street, Chicago, Ill.

J. N. LIMBERT & CO.

12 South Marshall Street
PHILADELPHIA

**Importers
of
Vanilla Beans**

All Varieties

Vanilla Beans

MEXICAN
BOURBON
SOUTH AMERICAN
TAHITI

OLIVE OILS

RICARDO GOMEZ & DIETLIN CO.
INC.

161 Maiden Lane
NEW YORK, N. Y.

**Maryland Automatic
Measuring and Filling Machines**

SAVE REAL MONEY

Write for particulars and learn how

MARYLAND FILLING MACHINES CO.
Baltimore, Md.

INFUSORIAL EARTH

Incomparable lightness in weight.
White — Fine, Uniform, Fluffy.

For

Toilet Preparations—Polishes
TAMMS SILICA CO. CHICAGO

MASSAGE COLD GREASELESS CREAMS IN BULK

or packed as you desire under your own brand and name. Write for samples and specimen labels.

AMERICAN PERFUMERY CO.

195 Grand St.

NEW YORK CITY

OXZYN COMPACTS ROUGE AND POWDER

Have the right tints.
Made in any size and box.
Furnished with the right mirror and puff.

OXZYN COMPANY
ORIGINAL NATURAL
ROUGE MAKERS

126 11th Avenue, New York

PATCHOL

Whether it be *Patchol*
or Patchouli Oil, as long
as the results are identical.

Use Patchol at about
1/3 the price of Patchouli.

Patchol, \$10.00 per pound in twenty-five pound lots.

"	10.25	"	"	five	"	"
"	10.50	"	"	single	"	"

For Soaps and Allied Compounds.

WOLMARK CHEMICAL CO.

17 EAST 14TH STREET

NEW YORK



← See How
It's Tied!

DISTINCTIVE-
LY — with
Heminway's Pack-
age Silk—to help
attract and hold
a better trade.

And Palmolive
is only one of
the many high-
class manufacturers who
realize that Heminway's
Package Silk gives to
the finished product the
little touch that makes
it really READY for
display.

The Heminway color
line matches any shade
of packing, not only for
perfumes, but packages
in general. Samples of
this package silk—in 5
different qualities—will
be sent gladly on re-
quest.

M. HEMINWAY & SONS
SILK CO.

DEPT. T,
WATERTOWN,
CONN.



EXTRA STRENGTH

¶ "Extra Strength" means: you can obtain
either a much stronger combination from the
amount you usually use, or the same amount of
satisfaction in flavor and bouquet from less than
the usual amount.

¶ If it were not for the higher vivacity of
flavor and piquancy of odor that our synthetics
possess, then you would need the customary
amount required of ordinary synthetics.

OIL ROSE SYN. OIL NEROLI SYN.
OIL VIOLET SYN. OIL JASMIN SYN.
JACINTHE JACINTHE "B"

OIL YLANG YLANG BOURBON


Prices on Application
Samples Cheerfully Furnished

H. C. RYLAND
ESSENTIAL OILS

Importer and Exporter

284 Pearl St.

NEW YORK




DONALD WILSON
MANAGER

AMERICAN BRANCH

TH. MÜHLETHALER CO.

80 JOHN STREET, NEW YORK

VIOLETTE ALPHA

❑ IMPORTÉ DE SUISSE ❑

JOIN YOUR ASSOCIATION

WHAT can you accomplish on your own account with regard to legislation, official rulings, tariff and the 1001 other matters of transcendent importance to every manufacturer? You must either *join* an association and *pay your share* of the expense of promoting the common good, or else sit back and enjoy the benefit of the other fellows' work and outlay.

Nothing can be accomplished in these days without combined effort!

Are you a slacker? Won't you pay for what you *are* receiving?

For full information regarding the six associations in this field write us.

PERFUMER PUBLISHING COMPANY
80 MAIDEN LANE NEW YORK

We Handle These Books

Chemistry of Essential Oils and Artificial Perfumes (Parry).....	\$5.00	Perfumes and Cosmetics (Askinson). \$5.00	
Chemistry of Perfumes (in French) (Jeancard)	2.50	Pure Food & Drug Laws (Westervelt)	7.50
Cosmetics (Koller)	2.50	Scientific American Cyclopedia of Formulas	5.00
Hydrogenation of Oils (Ellis).....	4.00	Soaps, Candles and Glycerine (Lamborne)	7.50
Industrial Chemistry (Rogers & Aubert)	5.00	Soapmaker's Handbook (Brannt)....	6.00
Le Parfum Chez la Plante (in French) (Charabot)	2.00	Textile Soaps and Oils (Hurst).....	3.00
Les Principes Odorants des Vegetaux (in French) (Charabot).....	2.00	Thornton on Pure Food and Drugs..	7.50
Manufacture of Perfumery (Deite)...	3.00	Toilet Soaps (Deite and King).....	5.00
Modern Formulary (Cummings).....	3.00	Twentieth Century Book of Recipes, Formulas and Processes.....	3.00
Modern Perfumery (in German) (Mann)	5.00	U. S. Dispensatory.....	7.00
National Formulary (net).....	2.50	U. S. Pharmacopoeia* (net).....	3.00
New Standard Formulary (Hiss & Ebert)	5.00	Volatile Oils (Gildermeister and Hoffman)	5.00

*Ninth Revision.

Perfumer Publishing Co., 80 Maiden Lane, N. Y.

REGISTER YOUR TRADE MARKS

The Supreme Court of the United States has recently decided that an *unregistered* trade mark is a protection in those States only where commerce has been done under the mark. If, for instance, your trade has been limited to the Eastern states, another manufacturer may later innocently adopt your trade mark in the Western states and prevent you from extending your business under the trade mark into those States.

Our trade mark department answers all your questions, and conducts special searches in the U. S. Patent Office for a moderate yearly fee and also handles separate cases.

Write for full particulars and save money and annoyance.

Trade Mark and Patent Dept., Perfumer Pub. Co.
80 MAIDEN LANE **NEW YORK**

JAMES A. WEBB & SON

50 and 52 Stone Street

NEW YORK

INDEX TO ADVERTISEMENTS

Addison Litho. Co.	10	Limbart & Co., J. N.	20
Alderman Fairchild Co.	21	Lorscheider-Schang Co., Inc., The	21
Alexander, A.	41	Lueders & Co., George	21
Allen & Sons, Ltd., Stafford	1	Madero Bros., Inc.	Inside Front Cover
American Can Co.	Outside Front Cover and 9	Magnus, Mabce & Reynard, Inc.	40
American Perfumery Co.	51	Marquardt & Co., Inc., H.	40
Arabol Mfg. Co.	2	Maryland Filling Machines Co.	40
Baker & Co., H. L.	41	Maschmeijer, Jr., A.	28
Barrett & Co., M. L.	28	Mendes Co., J. D.	28
Batzouroff & Fils, Joseph	13	Mero & Boyveau	41
Baxter Paper Box Co.	41	Metal Package Co.	41
Beiser Co., Edward T.	46	Milwaukee Paper Box Co.	46
Bennett & Davis	6 & 7	Mooney & Bueter	46
Bernard-Escoffier Fils	24	Morana, Compagnie	17 to 21
Bertrand Frères	Front Cover and 23	Muhlethaler Co., Th.	21
Bomeisler, Carl	21	Munter Co., Philip	21
Brass Goods Mfg. Co.	35	Naef & Co., M.	Inside Front Cover
Bromund Co., E. A.	47	National Aniline & Chem. Co.	22
Brown Co., Inc., O. A.	13	New England Collapsible Tube Co.	19
Buedingen, Wm., & Son	14	Nulomoline Co.	30
Burr, Edwin H.	12 & 33	Onzyn Co.	30
Burt Co., Ltd., F. N.	36	Peerless Tube Co.	41
Bush & Co., Inc., W. J.	27 & 30	Penick & Co., Inc., S. B.	4
Carr-Lowrey Glass Co.	16	Pennsylvania Oil Co.	20
Chiris Co., Antoine	4	Philadelphia Textile Machy. Co.	20
Christoff, Christo	20	Plymouth Organic Laboratories	41
Christy & Co., A. N.	48	Polak & Schwarz	28
Colton Co., Arthur	—	Rockhill & Victor	Front Cover and 23
Court, Bruno	18	Roure-Bertrand Fils	41
Daniels, W. B.	5	Rub-No-More Co.	40
Deegan Supply Co.	40	Russell & Co.	37 & 41
Dietlin Co., Ricardo Gomez &	50	Ryland, H. C.	41
Diller, Geo. K.	5	Schmid, Julius	22
Dragon Paper Mfg. Co.	40	Schmitt & Co., Inc., George	44
Drury & Co., A. C.	40	Schmoller & Bompard	40
Dupont, Justin	12	Schuster, Pablo	40
Durex Chem. Corp.	44	Sethness Co.	40
Duval, Compagnie	38	Smack Co., A. D.	40
Elbert & Company	33	Sparhawk, Chas. V.	40
Essential Oil Spec. Co.	33	Standard Specialty & Tube Co.	40
Evergreen Chem. Co.	49	Stanley Mfg. Co.	12
Fox & Sons, H. C.	21	Stokes Machine Co., F. J.	42
Francesconi & Co., J. C.	42	Stuart & Co., C. H.	38
Fries & Fries	38	Superior Seal & Label Co.	40
Fritzache Brothers	1	Swindell Bros.	30
Givaudan & Co., L.	3	Syndeur Scientific Laboratories	Insert
Gray Litho Co.	45	Tamms Silica Co.	20
Graves & Son, C. H.	34	Thurston & Braidich	1
Gross & Co., Geo. V.	24 & 39	Tin Decorating Co.	41
Heine & Co.	Insert	Tombarel Frères	30
Heminway & Sons Silk Co., M.	51	Tremari, Sucesores, Pedro	47
Houchin-Aiken Co.	31	Ungerer & Co.	Inside Front and Back Covers, 1, 2
Hugues Aine	30	Union Distilling Co.	20
Imperial Metal Mfg. Co.	21	Union Talc Co.	29
Innis, Speiden & Co.	46	Van Dyk & Co.	32 & 40
Ising, Chas. E.	29	Van Dyk, L. A.	40
Jarden Litho Co., The	29	Whitall Tatum Co.	2
Kiefer Mach. Co., Karl	43	Whittaker Co., W. H.	20
Krause, Richard M.	15	Wilson, Donald	20
Lautier Fils	3	Wirz, Inc., A. H.	Outside Back Cover and 11
Lemoine Successors, Pierre	46	Wolmark Chem. Co.	51
Lévy, Maurice	43		
Lightfoot Schultz Co.	21		

30	30
2, 10	2, 10
Cover	Cover
45	45
30	30
30	30
30	30
10	10
40	40
to 30	to 30
30	30
30	30
Cover	Cover
30	30
30	30
20	20
31	31
41	41
40	40
30	30
37	37
41	41
30	30
and 23	and 23
41	41
31	31
& 40	& 40
51	51
2	2
42	42
40	40
40	40
44	44
1	1
34	34
13	13
40	40
40	40
40	40
30	30
insert	insert
30	30
40	40
41	41
30	30
40	40
1, 30	1, 30
30	30
40	40
& 40	& 40
40	40
2	2
2	2
50	50
ed 11	ed 11
11	11